Issue No. 17

October 1958

AIR COOLED NEWS

PUBLICATION OF

THE H. H. FRANKLIN CLUB

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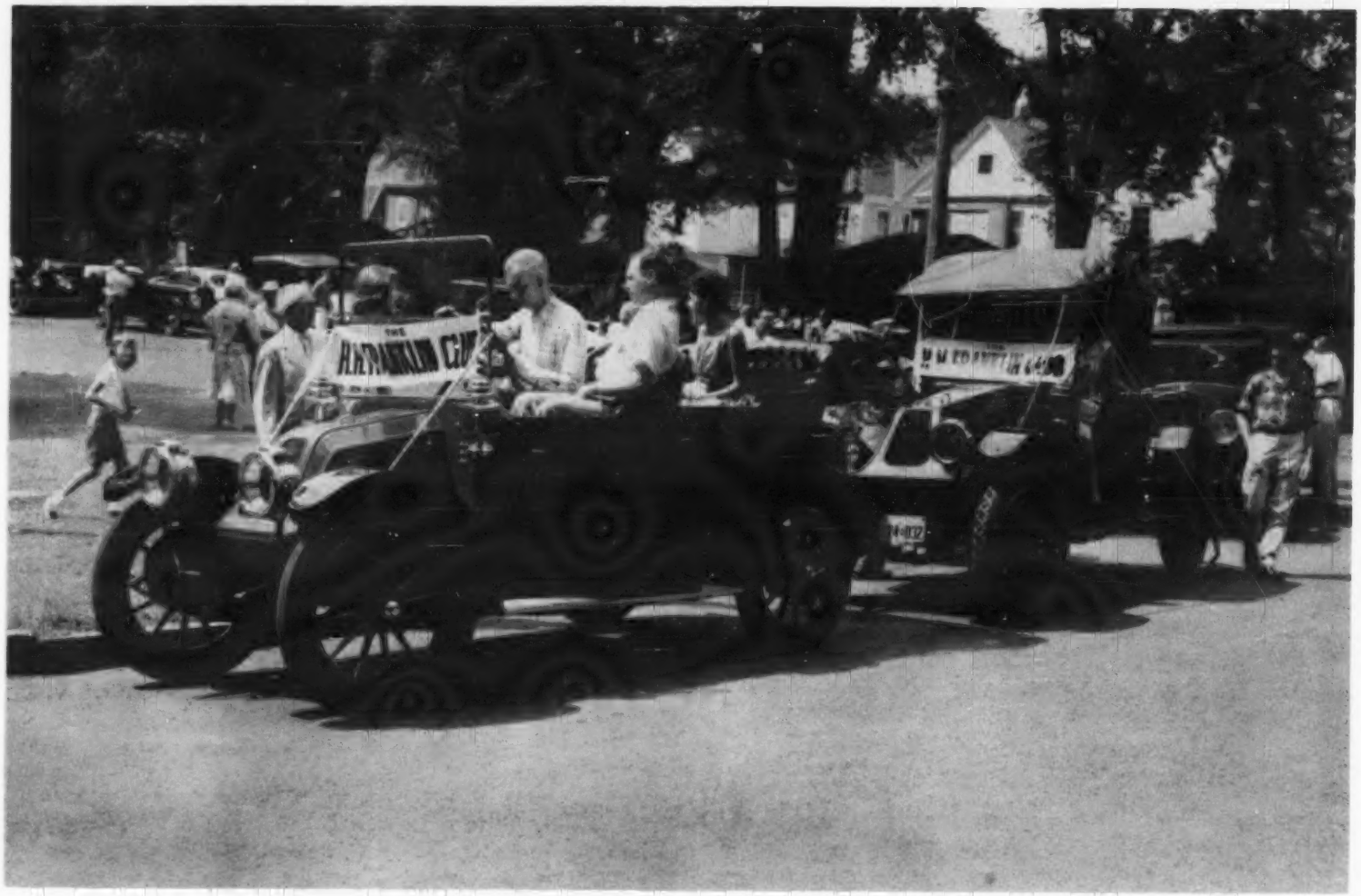

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THE H. H. FRANKLIN CLUB

Vol. VI. No. 2

OCTOBER 1958

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Corresponding Secretary: 252 North 7th Street, Allentown, Pennsylvania
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Our cover picture, a "Boyer Original", taken at the Fifth Trek and showing in actual operation that wonderful early automotive achievement, the one woman top, might have been taken at any meet anywhere, anytime.

The inside cover picture, by Howard, is of the Best in Show winner this year. We might note just in passing that Fenton Meredith seems to be doing alright, just glance in the tonneau and through the windshield. Might add that our Canadian friends in the next car did not exactly miss out either.

The inside rear cover picture, another Boyer, is, we think, a splendid portrayal of the emotions that are stirred by a fine antique. The devoted attendants are LeRoy Badgley, Don Kitchin and Bob Eckert.

The rear cover tells its own story. It was borrowed from Cabin John Smith.

William L. Mackey, of 511 10th., Street, S. E., Washington 3, D. C. has voluntarily undertaken and started a project that has often been asked for and will be of great value to all members. Member Bill Mackey is collecting, arranging and editing all possible material covering Serial Numbers, Engine Numbers and other identification data that we hope and believe will give us the most accurate list of this nature it is possible to work out at this late date. Such list when finally completed to Mr. Mackey's satisfaction will be published in some form by this Club.

NOW HEAR THIS, many of you have requested such a project, or at least have sought the product of such a program, so look over your own material and send in to Bill anything that might even possibly assist him in this big job. He will do the job but the thoroughness of the finished project will definitely be in proportion to the help he receives. Bill needs your data right now, get it to him.

Even if some of you have your doubts it can be scientifically proven that an editor is a human being and shares with other members of his species the usual reactions to the carrot and the stick. A professional editor once told us that the most frustrating part of his work was never to know if people even read the stuff he struggled over. After a year or two with this magazine we have come to know what he meant. Take the much belated December issue as an example. We cannot even remember how many days were used up in putting that together, and how many times this or that page was done over in the hopes that it would look better. Finally after some months we hopefully put it in the mail. DEAD SILENCE. Then, after a more than decent interval, nine letters made their way to us. One didn't think much of our efforts, eight said they were pleased, three of the eight came from other magazines, leaving six members that we can certainly assume read the issue. So, that means an overwhelming vote of confidence, five to one approval!

To our six readers, a long and prosperous life.

The normal time gap between issues is such that we feel there should be no continued articles published, that each story be complete in the issue. Because of this policy occasionally ACN seems a bit topheavy. The last number was certainly in that category but as it is part of the program to eventually try to cover all Franklins it is perhaps as good a way as any other plan. Our thought is that when we can acquire as fine a story as that on any particular car or period we will use it in full, hoping that we can, in intervening numbers bring out something of a balance in general interest.

Several of the articles now appearing were scheduled and even prepared for the last issue. In addition to the continuing historical coverage we would like to publish more in the technical field that would assist in restoring and efficiently maintaining our cars. Most of this must come from you findings and experience. let us have it.

We had hoped to include a story by Tom Hubbard in this issue but Mr. Hubbard has experienced delays in securing the pictures he wants to properly illustrate his article, so that fine treat will have to be postponed.

The last two issues were of twenty eight pages. We are sorry that our club growth and finances do not yet make this possible as a standard size. The extra cost of those two issues were met by a few anonymous club members.

GEORGE A. CUDDY

We have just belatedly learned through a business associate of the passing of member George Cuddy of Cleveland, Ohio, some time ago. We do not know any details of his passing. We extend the sympathies of the Club to his family.

ALONZO FLACK

The Club extends its sympathies to the family and friends of member Alonzo Flack of Elizabeth, New Jersey. We learned, quite indirectly, of his recent passing.

The Middleby

They Came
They Saw
They Copied

In presenting this short study of the MIDDLEBY we find that authorship must be shared for we received much assistance from various people. Member H. T. N. Graves of Luray, Virginia, who has a 1909 in his fine museum at the Caverns; member Henry Courten who prevailed upon non member Mr. Van Wyck Hewlett to send in much interesting data; member Earl Becker who secured the fine picture of the Norman Becker (No relation) 1910 car for us, and, of course, our thanks to Mr. Norman Becker.

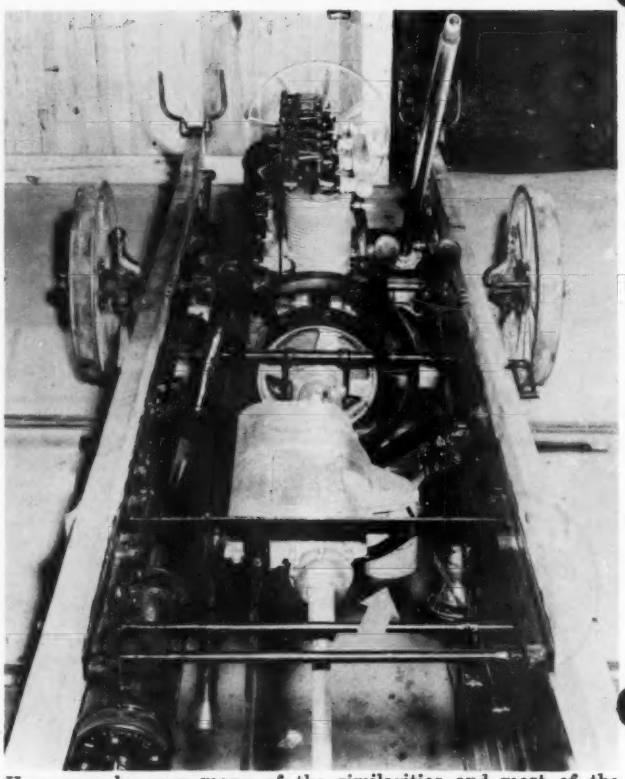
Most of the technical data is taken from the catalogue and further information furnished us by Mr. Hewlett.

We think this car is exceptionally interesting if only for its frank acceptance of Franklin principles almost throughout. The engine of this 1909-1910 car is almost a perfect copy of a 1907 Franklin Model D engine. About the only obvious difference is the belt driven fan and they may have had something there as Franklin's gear driven fan was frequently pretty noisy. The MIDDLEBY used the exact same setup of auxiliary exhausts but took care to designate them as the "main" exhausts with the "secondary exhausts" in the cylinder heads.

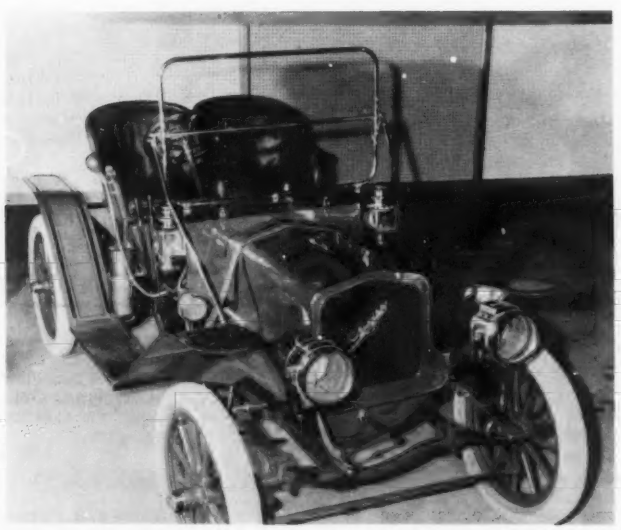
The MIDDLEBY also adopted Franklin's full elliptic springs and wooden frame with the same auxiliary steel rails for engine and gearbox mounting. They failed to also use the fine multiple disc clutch and reverted to the more primitive leather faced cone, no doubt with all its failings. The sliding gearbox with three forward speeds is in the usual amidships position but bears no outward resemblance to Franklin, probably little inward resemblance either as their catalogue makes a point of the heavy and "unusually wide faced" gears. They used Raymond contracting brakes and also internal expanding brakes on the rear wheels, while Franklin at that period used a Raymond contracting type brake on the transmission as a service brake.

Mr. Graves' Middleby was purchased in 1909 by Mr. H. J. Studebaker of Luray and was at that time the third automobile to be owned in the town. It was retired in 1915 but was still owned by the Studebaker family when purchased by Mr. Graves in 1951. The car has had a thorough restoration and today is a bright red with black leather and is equipped with a full set of original type white tires, these are a decided rarity.

The Middleby engine is a four cylinder, 4 x 4, the cast iron cylinders set separately on an aluminum crankcase. The valve system includes auxiliary exhaust as well as the regular exhaust, as was the case with Franklin the main exhaust

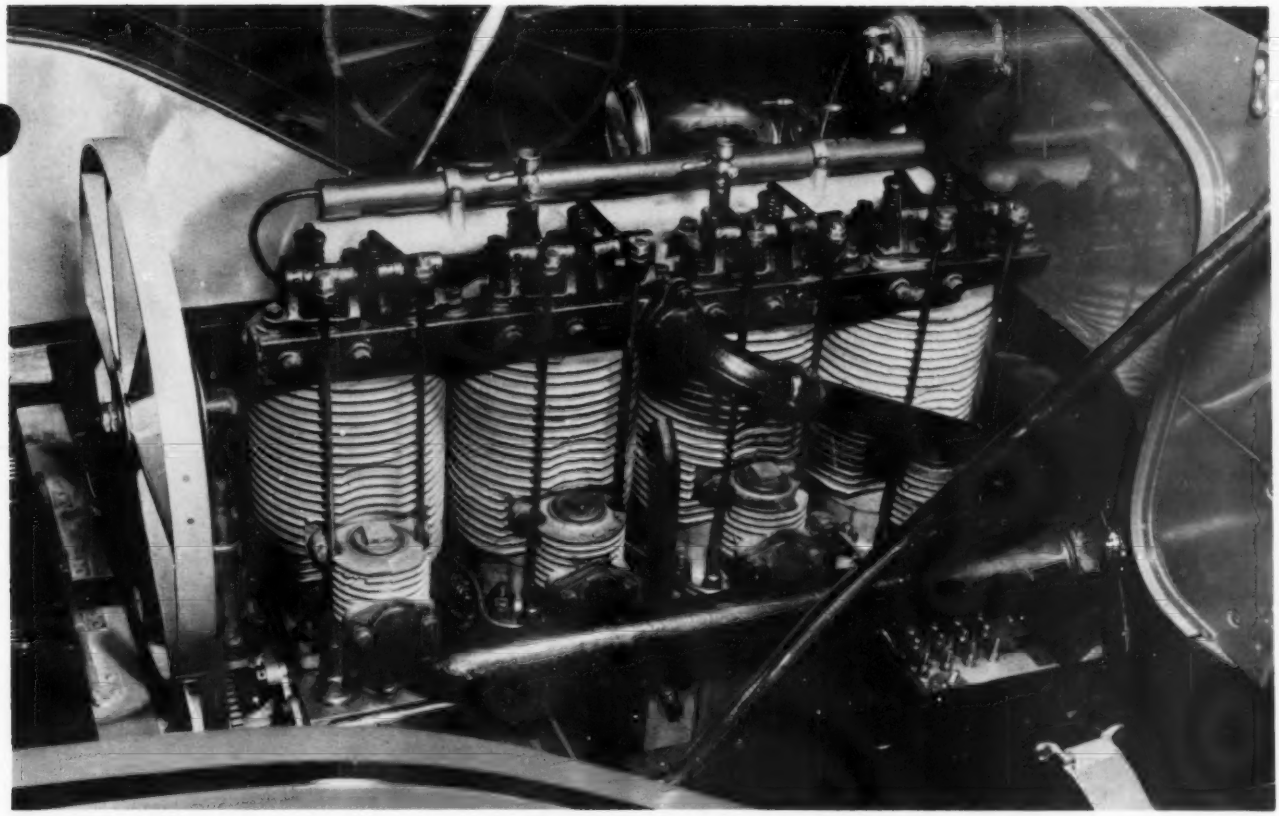


Here may be seen many of the similarities and most of the differences. The cone clutch may be clearly seen with almost exactly the same release rig as Franklin. The ponderous gear box is also shown, what appears to be a sort of cylindrical appendage (See arrow) is actually only a can sitting on the pit floor!

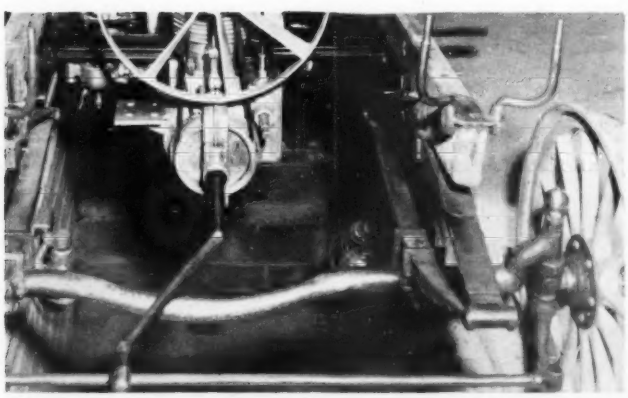


The restored 1909 of member H. T. N. Graves. This attractive little roadster has a rear deck of the type known as "cooter shell" to many of our Southern members. Notice the correct white tires that Mr. Graves was fortunate enough to find

Mr. Norman Becker with his beautiful blue and cream 1910 roadster. He found this car during 1954 somewhere in New York state and reports very nice performance, following lots of work.



This excellent picture shows the almost bolt for bolt copy of the Franklin engine. The belted fan and a different make of oiler are about the only differences to be seen, though it also used different ignition and clutch



This shows the reverse Lemoine type knuckles as well as the spring mounting and tie rod. The position of the crank handle at rest suggests the possibility that the Middleby may have been the inspiration for Band-Aids

(Middleby called these "secondary exhaust") was carried off without benefit of muffler. The auxiliary exhaust (our error again, the "main" exhaust) valves were mechanically operated all three from a single camshaft. The crankshaft operated in five main bearings of Parson's white brass.

The catalogue mentions a four unit spark coil for the Runabout and a high tension Splitdorf magneto on other models. Mr. Graves' car has the magneto and we believe the Becker car is also so equipped, though certainly both are runabouts.

In neither power transmission nor in steering control did Middleby stick very close to their apparent mentor. It uses a large leather cone clutch with an actuating system somewhat similar to Franklin, the cross shaft with its two fingers engages with two plain blocks instead of the full bronze collar but operates in about the same manner. The rather ponderous gear box is located amidships but otherwise is not similar to Franklin practice, the catalogue stressing the very large diameter and especially wide face of the gears. It is a three speed progressive type, Franklin by that time had gone to selective on similar type cars. From there power travelled through an open shaft to the semi-floating axle. Middleby included a torsion bar.

Steering was irreversible with apparently quite adequate adjustment devices. Franklin of that period used a reversible worm and gear type. The front axle seems to be a rather unusual arrangement. The knuckles might be classified as "reversed" Lemoine, as the idea of the Lemoine was to achieve a relatively high placing of the wheels the reason for this reversal is not too clear. The front axle is tubular, the knuckles apparently being welded to the ends of the tube, there seems to be no provision for adjustment of the tie rod. It may be noted that the full elliptic springs, used both front and rear are mounted above the axles, though Franklin had underslung these since 1906. The spring seats on the front axle are not integral but are of the split clamp type.

The Middleby used woodens sills that do not appear to be laminated. The catalogue mentions that these are stiffened by truss rods, quite apparent in the picture of the Becker car but not evident in the Luray specimen. The method of swinging engine and transmission is by the use of steel angle rails bolted to these sills.

Provision is made by an adjustable pedestal to take care of fan belt wear and the Virginia car shows adjustable headlight brackets. This car also shows an exceptionlly clean dashboard, a switch and a speedometer are all that may be seen.

Lubrication of the engine was by splash with a four unit mechanical oiler to maintain a constant sump level. Regular carburetor equipment was Schlebler. The hood was a nicely designed one piece affair that lifted off without tools. Wheelbase was 108", tires 32 x 4 on the Roadster and a weight of about 2100 pounds. (cont'd on page 21)

The New Administration

Howard

Treasurer Stanley Wilkinson President George Boyer Vice-President David Doman

We met Frank Boyer some few years after we had first known George Boyer. Both being medics Frank tried to straighten us out by saying that, "George is the cutting doctor, I'm the thinking doctor, I tell George where to cut." This amused us and we have frequently made flippant remarks about the Thinking Doctor and the Cutting Doctor.

At the 1958 Annual Meeting the Cutting Doctor became the fourth President of the Club. The Cutting Doctor is more formally known as Dr. George Samuel Boyer of Allentown, Pennsylvania.

Dr. George is the son of Caroline G. Boyer and the late Dr. Frank S. Boyer, the former is a well known Trekker. He was born in Allentown, Pennsylvania in June of 1916, after a boyhood, unrevealed to us, he graduated from Allentown High School, went on to Muhlenberg College for his Bachelor of Science degree in 1937, then followed his Doctor of Medicine tag from Temple. After a year's internship in Allentown he entered the Air Force as a Flight Surgeon with the Troop Carrier Command. Dr. George's unit was one of the most distinguished in the whole European Theatre. His military career began in Egypt in 1941 when he was attached to the British 8th Army under Montgomery, by War's end his outfit had participated in every important paratroop drop made, and the good doctor rates eleven battle stars. In anybody's army that means a lot of combat.

After the war he took post graduate work in surgery at the University of Pennsylvania, followed by a two year's residency in Surgery at Allentown in addition to a year at the Crile Clinic in Cleveland. Dr. Boyer has achieved quite a reputation in blood vessel graft operations and heads the vascular clinic at Allentown. Dr. George is highly respected for his diagnostic acuity as well as his meticulous attention to his patient's care and, the editor suspects, no small part of his fine medical reputation stems from his wonderfully charming personality, which has great therapeutic value.

Both Boyers inherited their love for Franklin from their Father who had a number of THE CARS in his lifetime. His last, a 1933 Olympic, is still in the family. Dr. George and Miss Betty Deibert were married in 1945, and as every Trek regular knows, have three daughters, Susan, Wendy and Nan.

We congratulate President-elect Boyer on his Staff; Stanley Wilkinson as Treasurer, David Doman as Vice-President and David Bausch, who is missing from the picture, as the first Corresponding Secretary. We congratulate the Club on its fine judgement in the selection of its 1959 President and its further good judgement in providing him with really able help.

Part of the Presidential Fleet

Taking The Fifth

To sound Americans there is a heavy measure of opprobrium in 'taking the Fifth", but to Franklin people this year it is both respectable and laudatory, for to them it means attending the Fifth Franklin Trek, from the club point of view patriotic and commendable. To those who did attend it may become remembered as the Year of Invasion, but more of that later.

Right now bouquets to the Committee (HHFC Standardized form, Type KFB) for a truly excellent bit of planning. Once again Ken Barton headed the committee, assisted by Chape Condit Vi Hosler and Dick Wright. After seeing the veritable smorgasbord that the Hoslers arranged for the Saturday luncheon at the Park I think that Vi rates some very special recognition.

I will not make a serious attempt to praise or thank the Trek Committee for it was done in the most sincere way possible by the unanimous vote of the members there that Ken Barton, Vi Hosler, Dick Wright and Chape Condit become our Permanent Trek Committee. If it is possible to improve the affair, the Sixth Trek, and their Fourth, should not be missed.

We were blessed with very fine weather, coming, during and going. Each year more people arrive on Thursday and by the time we left the garage Thursday night there were eleven cars on hand. However not enough key figures had arrived to hold the customary Advisors Meeting so a general bull session was substituted and Chape Condit got in to an informal, but most excellent, talk on lubrication of the old wagons. Chape s opinions on this subject, from a background of around thirty or more years as a lubrication engineer, were a real contribution to our general knowledge.

The registration setup was the same as formerly, held in the tenth floor parlor and with complete kits already available. These contained a Trek program, a ballot, banquet ticket and the recognition badge that contrary to most such things, was just right in size and definitely legible, neither typed nor long hand but in a good sized printed form. You could read without an embarrassing stare or squint.

That afternoon there was a drive to a park within the town where everyone could view the cars, it was setup particularly with the old Franklin employees in mind. Apparently a fair number of these turned out and probably enjoyed seeing once again the cars they had built. It is a disappointing, but to me quite understandable, thing that so few of these old Franklin workers can be interested in the club itself, but maybe as time goes on more of them will join with us.

A register had been set up at the park for these oldtimers but apparently not too many of them signed in. The following gentlemen did sign the register, all of them from Syracuse except Mr. Donald Jones who hails from Jordan, New York. Messrs: Howard J. Carey, William D. Osborne, E. Ross, Max G. Suarez, Bert C. Halstead, Claude E. Hull, John L. Smith, William Rogers, Bert Finn, H. L. Murphy, Arlo S. Purchase, Gustave Herzog, William M. Gale, Walter M. Sanford, Alfred A. Ward, Michael A. Walsh, Edward J. Quirk, William Hackett, Harold J. King, Alward J. Potter, James W. Hackett, Archie D. Woodworth and Donald W. Jones.

We left this park in midafternoon and returned to the garage. Dinner that evening, as was breakfast and luncheon, was unorganized other than the usual gathering of Franklin people at the tables. Around about eight in the evening we gathered in Parlor D for the Annual Meeting that was to be followed by the usual Smoker or Bull Session. It is my own belief that this combining of the two was a mistake, there seemed to be no clear cut line between a formal meeting and an informal gab session, the one degenerated into the other. I think it would be much better to hold the meeting during the daytime of Friday and devote the evening to the smoker, uncluttered with business.

After the usual clearing of the decks by going into the minutes of last year (which unaccountably were missing) and the ordinary necessary business of getting under way the Chairman of the Nominating Committee was called for the results of the annual election of Advisors. I thought the vote was surprisingly strong considering the lateness of mailing this year. It resulted in the election, for a two year term, of Earl Buchman Ohio; Ray Keeler, Connecticut; E. S. Clavel, Florida, and Walter W. Fife, California.

The election report was followed by much discussion on several points, chiefly finances and the publication.

The Treasurer's report was actually quite favorable but in my guise as the editor with a "payroll to meet" I hollered about higher publishing costs and all that sort of grief and then had to fight an attempt to raise the dues in the belief that it would be a losing game, it seems to have worked that way in many other small organizations and that our financial problems would best be solved by putting pressure on those who are slow in paying dues and seeking out new members. Incidentally 1958 has shown the best monthly rate on new members that I can recall.

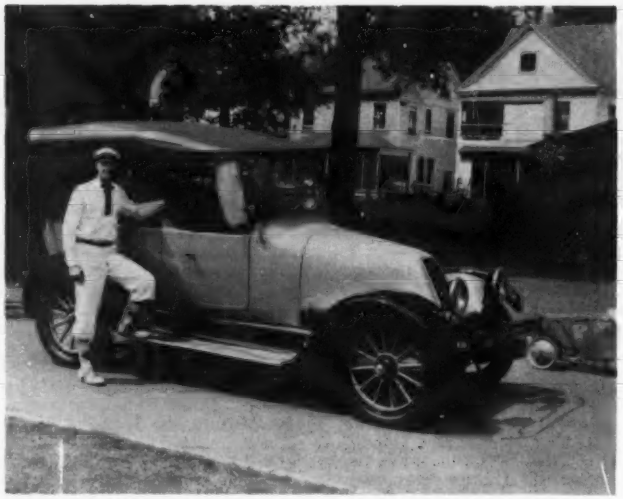
Lillian Mickle of Cobleskill, the 1956 Meeting Secretary, was again on hand and took over the job of recording events.

The meeting was, of course, presided over by President Pommer, who had, incidentally, informed the Board that he would not be available for possible reelection due to pressure of his regular work.

It was unanimously voted that instead of selecting a date each year the Trek would become a permanent Syracuse affair to be held on the third Friday and Saturday of August. The new Corresponding Secretary was instructed, as probably his first official duty, to convey this information to all other like clubs in the hopes that they will consider it in their own schedules. Now there is no longer any reason to delay plans for Trek attendance, in 1959 it will be August 14 - 15, you can just as easily know when to start packing in '60 and '61.

On Saturday the Amicks made an unsuccessful attempt to better some of the old Franklin economy records. There were cynical people there who said they merely ran out of gas, particularly those who happened to notice Dick Wright pulling the car so as to improve the vacuum tank characteristics.

Years ago it was the custom at most flying fields to award a beautifully polished wooden dumbbell for the prize boner of the month. Mavbe that would be a good idea at the Trek. A couple of years ago it would have been won, hands down, by certain New York people who nonchalantly threw away the old top bows of a car they were restoring, don't know who might have taken it last year, but this year our own gasoline episode would have had to be considered along with a certain newcomer who drove all the way from New Jersey in a 9B with the starter switch in neutral.



Among the newcomers was Roy Badgley and his 9B Howard Boyer

This old bird has a deep seated aversion to being in parades, a few minutes of a slow parade brings out almost forgotten gems of profanity. The Saturday parade was a pip. Fred Pommer told me with a straight face that he was holding twenty five, probably knowing that our speedometer was out, while certain other participants reported from eight to ten. I'll go along with them. Anyway we had a bum clutch all the way home. We should have made our record attempt on the way out. Wonder why the promise of a parade will bring some folks hundreds of miles in their old cars while others, like myself, will dream up all kinds of excuses, including blunt refusal, to get out of putting their cars through that torture. The only parade I have ever been in that did not put me in a vile humor was the run to Brewerton on the Fourth Trek, that was endurable and the best managed I've ever seen. But I still don't like 'em! Thought that sounded funny, just remembered that I didn't drive on that one, rode with Carl Poster. No wonder I didn't mind it too much!

INVASION

The Whiskey Consumers International, thinly disguised as Volunteer Firemen, held their annual convention at the hotel concurrent with our affair. It was a losing game for us, we were outnumbered, they "got there fustest with the mostest" and made things right miserable for the Franklinites, just about nobody got any real sleep, the second night they were still going strong at past three in the morning in the room next to ours.

Before leaving Frank Boyer and I talked it over with Manager Don Williams, as we surely did not want to run into a situation like that again. Don is alright, he neither tried any alibis or attempted to belittle the miserable situation. He showed us the night clerk's report, it must have been something about 350 firemen were registered there but the night man estimated that over 2000 took over the hotel that night with the uproar and fights that could be expected. Being versed neither in law nor police matters I probably do not know what I am talking about but it did seem that the hotel was given no aid by the local authorities in trying to handle what turned into a minor riot. Later on I received a fine letter from James Gilday, the Executive Vice President, who told me of their troubles but also of the bright fact that the same gang would not turn up there again for five or more years. Mr. Gilday also suggested that the Trek people be given a separate floor for themselves next year. I commend this idea to the Committee, it should make our affair more pleasant regardless of firemen.

The June bug hamper of the 1912 Little Six Roadster owned by member Joseph Gest of Montreal. This is the first car to attend a Trek from across the Border

For the first time we had a "foreign" car, Rene Verronneau and Victor Tremblay of Montreal brought in Joe Gest's 1912 roadster. This car, with an apparent special body, Howard Franklin says he never saw another like it, was the first car ever owned by Orville Wright. The original engine was lost to a scrap drive and member Gest has been a number of years in trying to get it back on its feet. We hope to see it again next year and hope Joe will come along as well as his two likeable Canadian friends.

Arriving late Saturday evening was Frank Ham of Dixfield, Maine, who had made a long hard drive in his, to say the least, unusual "interpretation" of the ideal Franklin. While Frank has not yet had time to "pretty up" this job he did report very fine performance on the trip.

In addition to these several newcomers among cars were the Regulars. Harry Moore and his Pirate, Nelson Reynolds with his Series 9 of the cut glass windwings and President Pommer in his almost entirely original Series 12 formed a trio of cars and drivers who have made all five Treks. We hope this faithful three will be on hand in Fifty Nine, maybe we'll give a prize, about twenty years hence, to the final Trek survivor of this hardy squadron. I was just too lazy to actually check but estimate that about twenty odd members have made all five trips, albeit under various transportation means, maybe some have always come in a Franklin (I have heard of none who walked) but only the Five Star people above mentioned have made them all in the same Franklin. Aura Vincit!

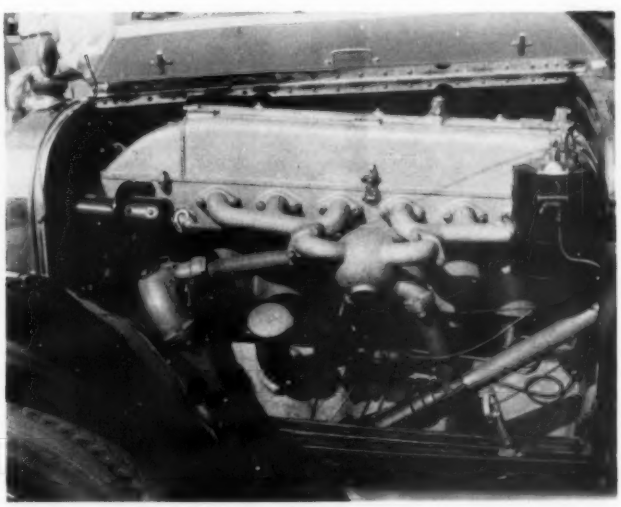
Boyer

The very good looking, well made and capable FOX owned by George Kipp of Niverville, New York

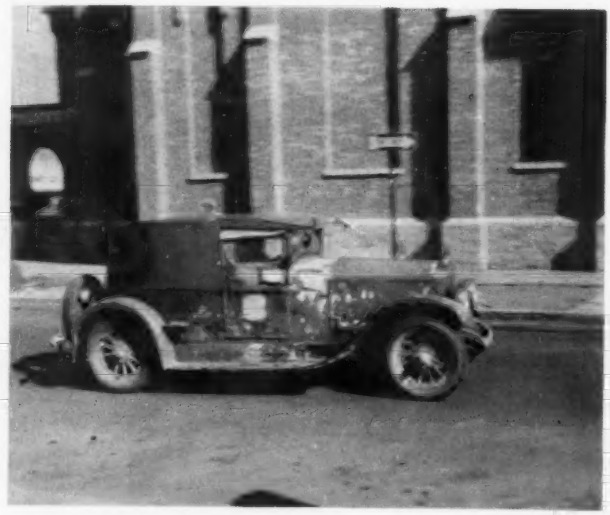
George Kipp and Archie Snare of Niverville, New York, brought in an air cooled Fox, the first ever seen at a Trek and believed to be the only one "alive". Yep, for the benefit of you doubters it has an overhead camshaft, just like the man said. George was Marshall on the first day, no doubt he did a good job but on all parades I am so busy cussing that I really don't know. Next day Dick Wright was the Marshall, I do not know exactly why, maybe one day of marshalling those windjammer pilots was enough for Kipp. By the way, George has a Series 4 roadster also, this man's dream car! He promised to bring it along in '59.

Our hotel has shown an unvarying ability to serve a splendid dinner with a minimum of fuss, this time was not any exception. I am not one of those Tarzan like people who beat their chests and roar at the sight of rare beef, I much prefer pig meat (I don't like cold showers either!), but the beef we had there was just about as good as any I have ever tasted. I had a local guest there, my closest friend during W. W. 1, didn't dare introduce him for I learned, during the dinner, that he was the attorney who handled the sale of the plant for the city. Just didn't want to risk a lynching.

President Pommer presides at the dinner. Mr. and Mrs. Carl Doman to his right, to his left, almost hidden, is Mrs. Pommer, then President elect Boyer and Mrs. Caroline Boyer. Smack in front is the younger Mr. Condit. Howard



The sputnik like engine of the FOX was very well made and could have given a pointer or two to Franklin in some details Boyer



Boram

Frank Ham in his unusual Franklin hybrid

At the dinner Retiring President Fred Pommer called on Miles Amick to introduce the Honorary Members present, Miss Gladys Bliss and Mrs. Clayton Carris. This year Grace Carris arrived early Thursday for a bit heavier shopping schedule. Following the introductions President Pommer announced the election of Mrs. John L. Burns to Honorary Membership.

Past President (Once Removed) Chape Condit then introduced one of the guests, Billy Hackett. Mr. William Hackett, now retired, will be known to many of you as one of Cannon Ball Baker's lieutenants during the assault on Pikes Peak. Chape called Billy, without reservations, the best Franklin mechanic he had ever known, and that covers a lot of ground! Later in the evening Miles told me that Mr. Hackett had agreed to serve on the informal technical committee that now handles the John Burns Column in AIR COOLED NEWS. That should make quite an addition to an already distinguished board.

Next came the announcement of the elected administration for 1959, Dr. George S. Boyer as President, David T. Doman as Vice-President and Stanley D. Wilkinson succeeding himself as Treasurer. This year a long needed new office was created, Corresponding Secretary. The first to fill this job will be David Bausch. Essentially the job will be to relieve the regular Secretary (Wilkinson) of much of his detailed work and to create a new office where general correspondence may be directed for suitable action. Dave has already assumed his duties and all correspondence other than payment of dues, ACN business and inquiries to the Information Center should be routed through Dave Bausch at Allentown, Pennsylvania.

Why have pill rollers all over the world bluffed editors into always prefacing their names with "Dr."? We don't ever refer to Engr. Carl Doman, Jwlr. Athol Odell, Pblr. Floyd Clymer or even Bnkr. Kenneth Barton. To heck with you medics, in ACN from here on out (unless we forget) our new President is George Boyer.

It may be well to mention that the new President, George Boyer and David Bausch have agreed to put out a newsletter, three or four times a year, to augment AIR COOLED NEWS. At Trek time details were still to be hashed out but among the ideas, in addition to merely more frequent mailings of the Club, was the thought that such a paper would provide much fresher classified advertisements and would be an excellent vehicle for Regional news and the more personal items of club affairs. George and Dave agreed to do the work (The editor's sympathies!) but credit for the idea must go to Howard Franklin. Anyway, send your ideas and your news to Dave.

When the awards were announced by Judge Reynolds it was a surprise to no one that Best in Show went to Meredith's 1911 G. To try to remember other splendid restorations at the Trek and compare them mentally with this car was somewhat like trying to remember taste or pain, but I do believe that no finer job ever appeared than this gem from the capable hands of Vice-President Buchman and Treasurer Wilkinson who converted a rough one into the beauty seen at Syracuse. We have just learned that this car also, with Fenton and Earl as crew, was awarded the H. H. Franklin Memorial Award in the 1958 Glidden Tour. When Fenton was presented the Best in Show tray by Reynolds there was some question in the minds of the Trekkers whether it was for the G or for the TRAILER. (If you have seen this masterpiece of engineering, architecture, and gracious living you will understand the compulsion to print it with capitals).

Following the award to the Trailer, or the G, Reynolds announced the class ribbon winners and a fine looking lot of cars they were, even when viewed in the shadow of the Trailer.

1902 Through Series 9B

1.	Earl Buchman	1912 Touring
2.	LeRoy Badgeley	1918 Touring
2.	Joseph Gest	1912 Roadster

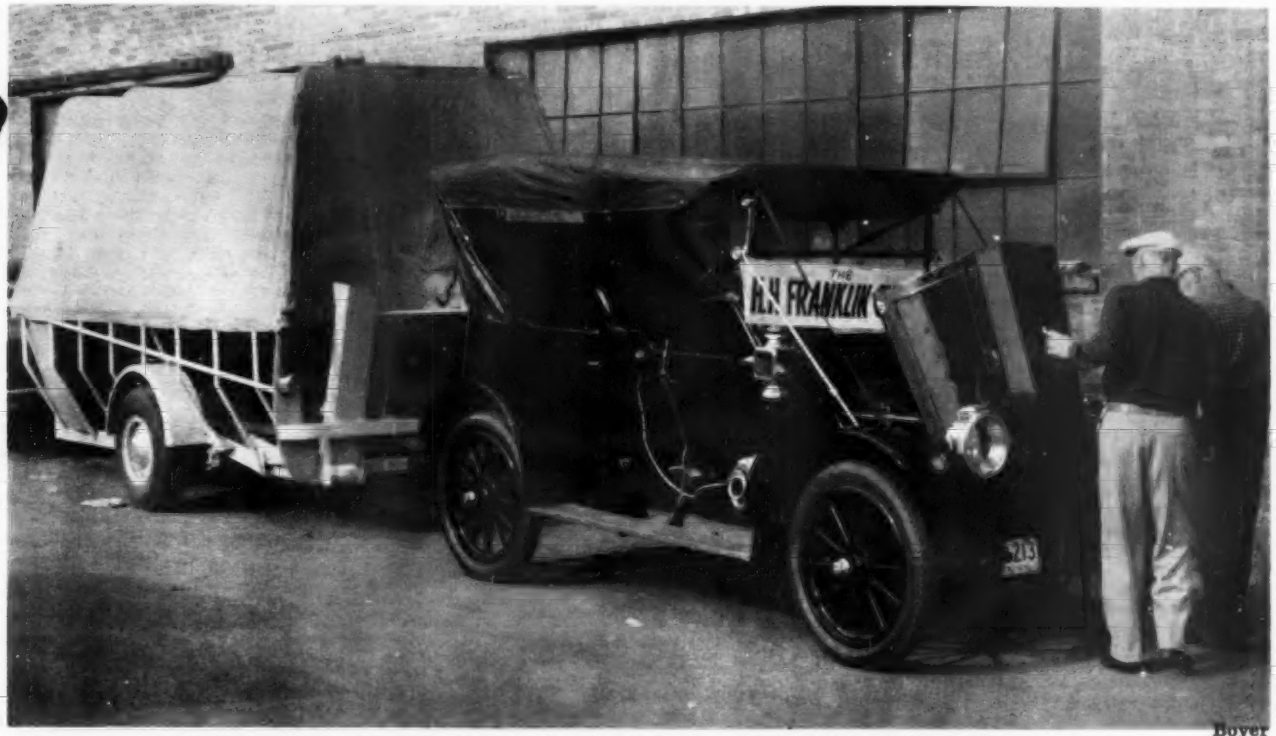
Series 10A Through 1934

1.	George Boyer	1928 12B Sedan
2.	Henry Manwell	1927 11B Sedan
3.	Fredrick Pommer	1926 11A Touring

On the Friday run Howard

Relaxing at the Park after luncheon are Albert Walker, Earl Buchman, Fenton Meredith, Carolyn and Miles Amick, Stan Wilkinson and A. H. Amick

At this point it is usual to say that, "the President next introduced the speaker of the evening", or something like that, but in my mind to "introduce" Carl Doman at one of our gatherings is about as necessary as water wings for a duck. Carl gave us a well prepared and thorough talk on some of the problems faced by today's automobile makers and why he believed that many of the things some of us wish for are not to be forthcoming. The smaller, cheaper car that some of us would like to see, according to Mr. Doman and most other industry leaders cannot be produced and sold today. Carl, as does the industry in united front, save only George Romney of Rambler, believes that the invasion of foreign small cars has little serious bearing on the automobile picture in this country. Carl Doman would never state publicly a belief that he did not also hold privately, but the industry's constant jeering (if that be the word) at the little cars and the motives of their buyers reminds me of a few of Shakespeare's words, "It seems he doth protest too much".



Boyer

This is it. THE TRAILER. The little '12 G was not towing it. In fact Earl Buchman and his car should simply be ignored in this picture!

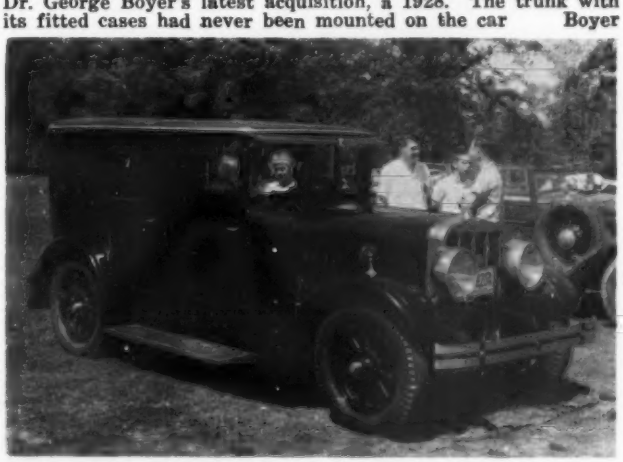
Carl, it was a fine speech, I just hope you could be wrong on a few points. A guest at my table who had no crow to pick, as he is content with cars as they are, told me it was one of the clearest and best prepared talks he had ever heard.

The Fifth Trek ended officially following the conclusion of the address by Mr. Doman, but as always it took a long hour to clear the room of all the Trekkers. Eventually we dispersed to our rooms for such meagre sleep as the Invading Forces permitted.

These were there

Mr. and Mrs. A. H. Amick, Mr. and Mrs. Miles S. Amick, Mr. Leonard Aquilino, Jr., Mr. Ronald M. Andrew, Mr. LeRoy M. Badgley, Mr. and Mrs. Kenneth F. Barton, Mr. David K. Bausch, Mr. and Mrs. Arthur M. Beach, Miss Edna Belsner, Miss Gladys L. Bliss, Mr. Clifford W. Boram, Mrs. Caroline Boyer, Miss Carol Boyer, Miss Nanette Boyer, Miss Susan Boyer, Miss Wendy Boyer, Dr. Frank R. Boyer, Dr. George S. Boyer, Mr. E. B. Brown, Mr. Earl Buchman, Miss Prucia R. Russell, Mrs. Clayton S. Carris, Mr. Douglas Condit, Mr. W. Chapin Condit, Miss Betty Doman, Mr. and Mrs. Carl T. Doman, Mr. David Doman, Mr. Russell Decker, Jr., Mr. Raymond Driver, Dr. Robert T. Eckert, Mr. Karl W. Feather, Miss Daisy R. Foster, Mr. and Mrs. John Carl Foster, Jr., Mr. Howard S. Franklin, Mr. and Mrs. William Gale, Miss Marlene Gewand, Mr. and Mrs. William G. Gewand, Mr. William Hackett, Mr. Richard T. Hall, Mr. Frank H. Ham, Mr. and Mrs. Lowell E. Hitchner, Miss Violet Hosler, Mr. Gordon Howard, Mr. Godwin G. Johnson, Mr. Edward Jones, Jr., Mr. Raymond M. Keeler, Mr. Robert R. Keeler, Mr. and Mrs. Kenneth W. M. Kern, Mr. and Mrs. R. D. Kern, Mr. George A. Kipp, Mr. Donald W. Kitchin, Jr., Dr. Catherine Logan, Mr. and Mrs. Theodore Mickle, Mr. William H. Miller, Mr. John Marshall, Mr. Henry Manwell, Mr. W. Fenton Meredith, Mr. George S. Metzger, Mr. Harry M. Moore, Mr. and Mrs. Fredrick J. Pommer, Mr. David Redding, Miss Julia Redding, Dr. and Mrs. Mark L. Redding, Mr. and Mrs. Nelson P. Reynolds, Mr. and Mrs. Edward A. Sammis, Miss Jane K. Sammis, Mr. Paul K. Sammis, Mr. Ralph K. Sammis, Mr. and Mrs. Charles R. Smith, Jr., Mr. Archie Snare, Mr. Robert L. Stockwell, Mr. Vernon Stone, Miss Virginia E. K. Thompson, Mr. and Mrs. William A. Thompson, Mr. Victor Tremblay, Mr. Burton S. Valiton, Mr. Rene Verronneau, Mr. and Mrs. Albert L. Walker, Mr. Rupert L. Wooden, Mr. Thomas Weiland, Mr. Stanley D. Wilkinson, Jr., Mr. and Mrs. Charles R. Woods, Mr. Richard N. Wright, Mr. and Mrs. Frederick Zigrest, Mr. James A. Zimmer.

Howard Franklin, aided by Earl Buchman, checks over Dr. George Boyer's latest acquisition, a 1928. The trunk with its fitted cases had never been mounted on the car Boyer



A few of the Sammis tribe at the Park. Trek newcomers but old members from Roslyn Heights, New York Boyer

Body by Philips

By JUDSON L. PHILIPS and HARRY M. MOORE

When I acquired my 10-C Convertible with its attractive Philips body, I was curious to learn more about this Ohio company. I succeeded in locating Mr. Judson L. Philips, now Sales Manager for the Ohio Corrugating Company at Warren, who is the son of Frank W. Philips. The elder Mr. Philips started his body building career in buggy days and founded the Philips Body Company in Warren, Ohio, in 1922. In his very courteous correspondence Mr. Judson Philips has given me a most interesting and complete description of body building in that era, I feel it will be equally interesting to others and offer it substantially as it was written.

My own example of a Philips body has not yet been properly restored and includes, among a few details, quite unauthentic headlamps. Its lines are good and very attractive; it should eventually make a fine little Franklin.

The company started in 1922 in Cleveland and absorbed the Art Craft Top Company who made tops to be installed on touring car bodies which made a closed car out of the car. Business was done there for about six months when business was moved to Warren, Ohio situated on West Market Street. The plant was owned by General Electric and was later taken back by them and today is in use for part of their auto head l'ght and beamer lights production. The company was closed out in the year 1929. The founder, Mr. Frank W. Philips was taken seriously sick and company had to be closed out. He died in that year. The business might have continued except for the loss of the founder but the type of business would have been changed with the years. Just what turn, anyone can guess.

The wood used in the making of auto bodies was ash, all Northern ash. It was air dried then put through a kiln to be sure water content was uniform and start to air conditioning for moisture content.

This material was put through the wood mill and shaped on forms to various parts required in body frame, sills, door frames and cowls.

These parts then went to the framing department where the start was the sill and frame and built from there on up. All parts were glued and wood screws used. When the frame left this department the body had taken shape. Doors were hung and continued on through with this body.

From this department it progressed to the metal department. Aluminum sheets were used entirely. The cowls, back decks, etcetera were shaped first on a metal hammer. This was operated by a hammerman. That was the skilled man, few had the knack of handling sheets and running hammer. to draw the metal. The sheets went from the hammer to metal workers. They were Fins mainly, some Hungarians and Slavs. Their hand hammers and other pieces that had no name usually had been handed down from father to son. Many had learned their trade in the old country. The first step was to nail these sheet parts to the wood shells. Naturally there were low and high spots. Their hammers and irons took these out. The aluminum sheet was very smooth so next step was to file the aluminum, to roughen it up for a base paint to show up any low spots not detected. The files used were Vixen. Minnesota Mining had a sanding cloth that was rubbed over entire shell to smooth out the filings.

The body was now ready to go to the paint shop to be painted according to the colors specified. The first bodies were varnished same as buggies were in the old days except that paint companies had developed materials that dried in less time than materials in horse and buggy days. In those days one figured on six months to finish a buggy through varnish which was the final coat.

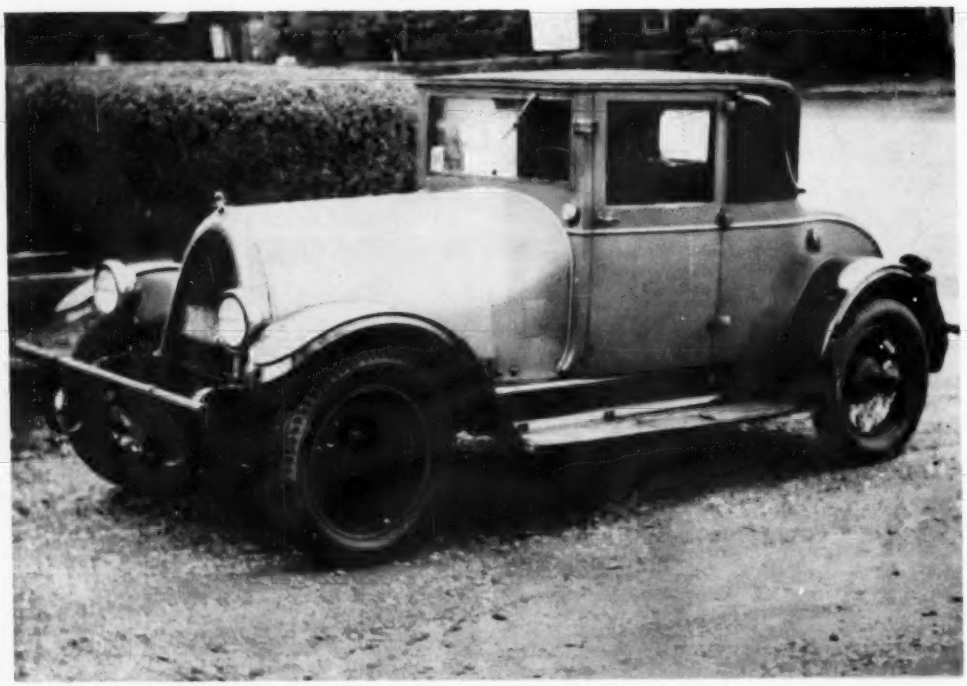
The body was given a primer coat and this dried in twenty four hours after application. It was then rubbed out with water and a pumice stone. Another primer coat applied and same progress again. Then the under coating usually a gray appearance or black. There were three or four coats of this and each one rubbed out wet. Usually with pumice stone but sometimes with wet sand paper, the grit getting finer on each coat. Now the color was started and rubbed out with same proceedure for three or four coats. Then the body was ready for the application of varnish. However, before it was varnished, it was mounted on the chassis and trimmed.

This was the first method which went out with the advent of lacquer which was sprayed on in spray booths as you know. In the early days there was a primer then under coat and then finish color. All these stages were hurried up by oven drying.

It did away with the problem of dust proof rooms to apply the varnish and cut the painting time required down at least three-fourths even on the start.

Have to retrace our steps a little now. The body had arrived in paint. Doors were hung on it. Window regulators were installed and door locks had to be installed and was done during drying time between paint coats. Windshields were made by Troy Sunshade Co in Troy, Ohio. Doors during these drying periods were checked as to hanging but required further check after being mounted on the chassis.

(cont'd on page 20)



Again The Airmobile

Unfortunately Issue Number 3 of Air Cooled News, printed back in 1953, is long out of print. Its feature article was the story of the Airmobile. This excellently written story by Carl Doman probably brought in more controversial correspondence than anything that has yet been published in ACN. Issue Number 11, October 1956 contains several good pictures of the car and brief editorial comment. It took considerable persuasion to secure this recently uncovered picture and the brief resume of the Airmobile. Mr. Doman will take it from here.

Just a short time ago I had a very interesting discussion with the Advanced Car Engineer of one of the major motor car manufacturers on the past and future of the automobile business. Quite naturally, and I assume casually, I mentioned a few of the fundamental principles of direct air cooling of engines. The Franklin car was discussed from many angles, especially the engine.

In the discussion, I mentioned that a direct air cooled engine required approximately one-third of the volume of air to cool it as does an indirect air cooled, or water cooled, as it is usually designated. Or, expressed differently, if a Series 16 Franklin required 4400 cubic feet of air per minute to flow over the cylinder fins, as a water cooled engine 13,200 cubic feet would have been necessary. Of course I was challenged but, fortunately, facts and figures clinched the argument in favor of Franklin.

We next drifted into the pros and cons of front versus rear wheel drive cars. I mentioned the Airmobile, then suggested that this friendly engineer read the story on the Airmobile in Issue #3 of Air Cooled News. I also left with him the summary of performance and pertinent information about the Airmobile. He asked that he be permitted to read it over the weekend.

Inasmuch as I shortly went away on my vacation (Franklin Trek included) the discussion with the engineer left my mind. One day my assistant, George Brown, called me and said, "I have been through your mail. Everything is in order. Stay away longer. But you would be interested in a note from your friend, the Advanced Engineer. He read me the following:

"I found the enclosed material very interesting, and enjoyed reading it as well as talking to you. We are submitting a program which allows a relatively small amount for air cooled engine studies which will be conducted by Product Study, and I am sure they will be very glad to have your help if the work does go forward.

"There are attached copies of two pictures I took in Philadelphia in 1938, showing what seems to be your little car with a restyled front end that looks much better to 1958 eyes. I thought you might be interested. I certainly got a kick out of identifying that vehicle after 20 years of wondering what it was."

When I returned to my office following the vacation, I phoned my friend for the information. I explained that the original car had been styled by Mr. Lewis. We built it exactly as he dictated, as he furnished the funds. Later the car was restyled as the photograph shows. The mechanical features remained unchanged.

Excuse me for again refreshing your mind on the front wheel drive Airmobile.

This 5 passenger, 2200 lb. car was completed on March 1, 1937 at a total cost of $25,000. At that time it was delivered to a Denver promoter. Design, development and test period 8 months.

Engine: 4-cylinder; 3-7/16" bore, 3½" stroke; 129 cubic inches; 57 h.p. all accessories 3700 r.p.m.; overhead valves; hydraulic valve lifters; 6.5 compression ratio.

General Construction: Cast iron crankcase, forged crankshaft, cast iron camshaft, individual aluminum cylinders, cast iron liner. Note: Production engine would have incorporated either a unit construction where cylinders and crankcase were one unit with removable cylinder heads, or die cast cylinder block, cylinder heads with thin cast iron liners. Cost analysis showed either of these engines to be less than a water cooled power plant when allowance was made for the elimination of the conventional radiator, hoses, fan, fan shroud, etcetera.

Performance: 85 m.p.h. top speed. 43.5 m.p.g. fuel average for 45,000 miles in service.

Weight Distribution: Light—1600 lbs. front, 600 lbs. rear.

Traction: Poor in snow, especially on inclines.

Selling Price: Volume 100,000 units per year, $500. Complete cost analysis prepared for promoter.

Suspension: Independent, using parallel leaf springs in front, single spring in rear.

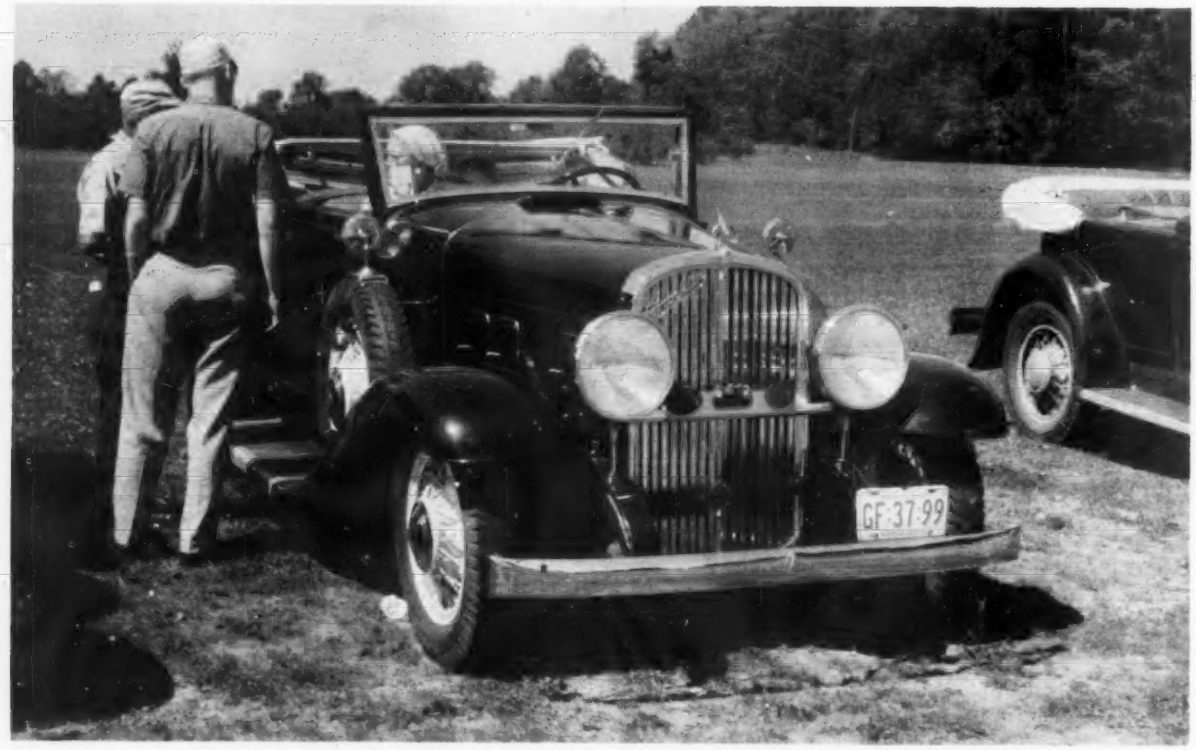
Power Plant Assembly: Engine, transmission, differential and pinion, steering gear, front suspension spirngs. wheels and tires single unit. Sometimes designated as "tractor".

Body: Unit construction, mounted on "tractor" units with 5 rubber biscuits. Promoter planned for customer to purchase various body types and to be pulled with the one tractor. Bodies planned: 2-door sedan, panel, convertible, truck.

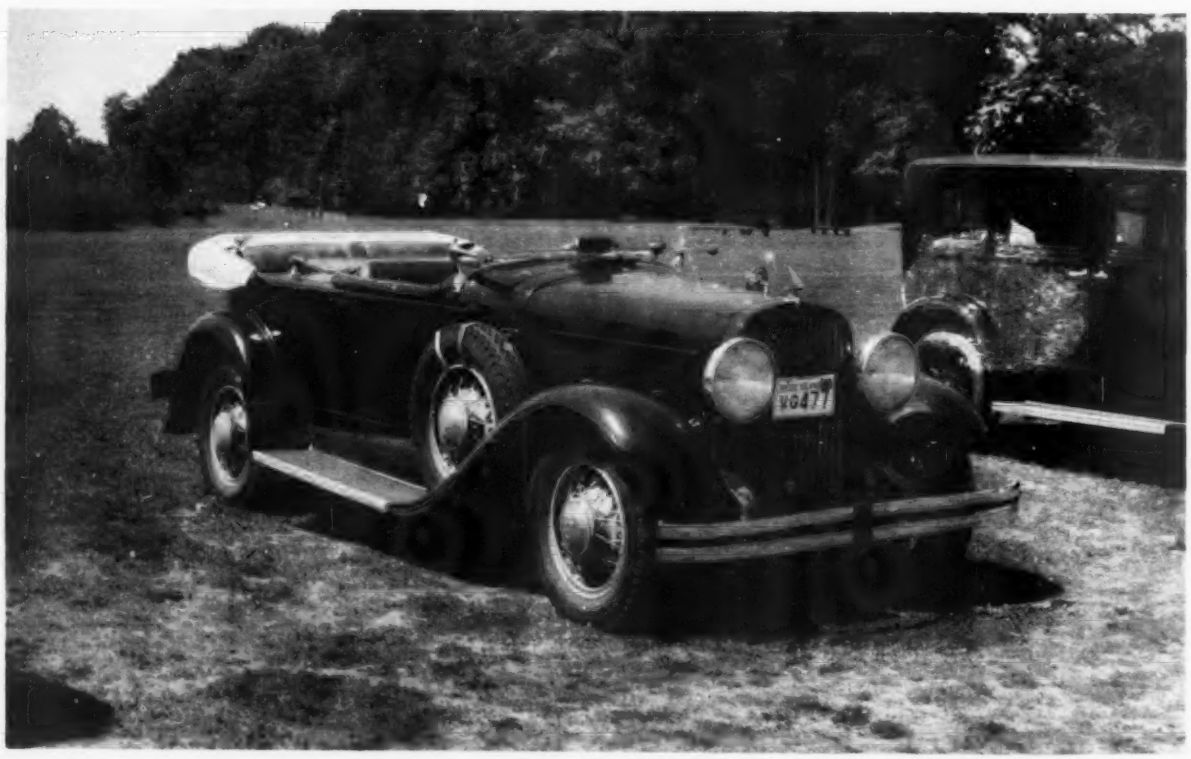
Car had exceptional appeal, rode well. handled easily. and had extraordinary performance for 1937. No major mechanical problem developed.

Carl T. Doman

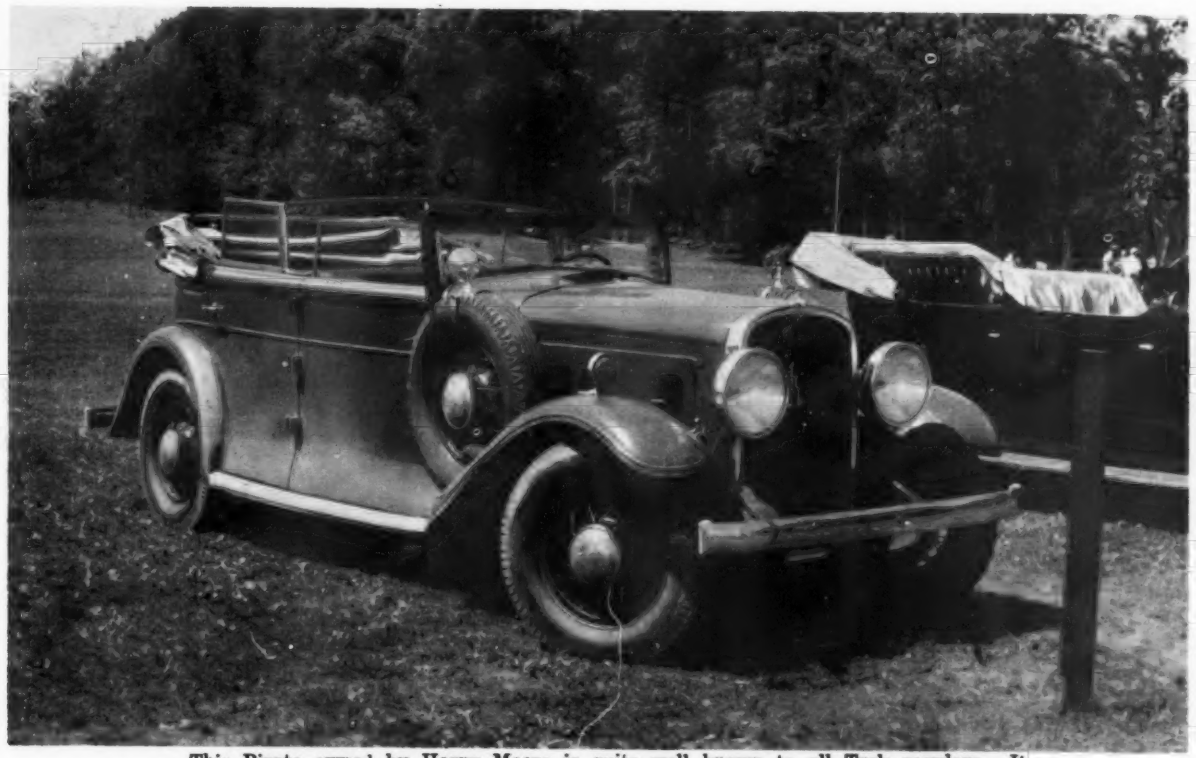
September 16, 1958



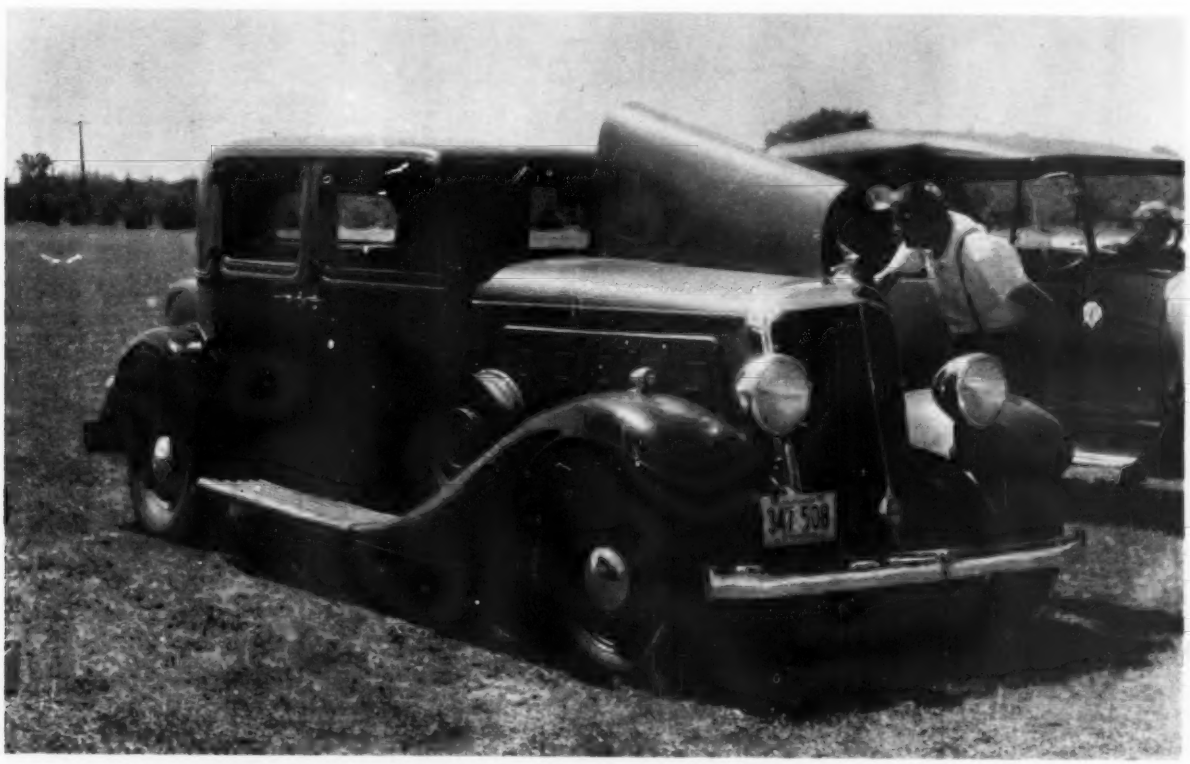
A few Marylanders gathered around the good looking 1931 convertible of Charles R. Smith. The Smiths, who are ardent classic fans, have taken this car on many long trips



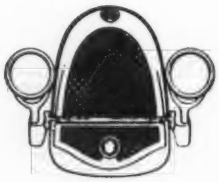
Ronald Andrew's 1931 double cowl phaeton. This fine car has made a number of Treks and is well known to many club members



This Pirate owned by Harry Moore is quite well known to all Trek regulars. It is claimed that this job by member Ray Deitrich started the concealed running board trend



Harry Moore seems much interested in the 1934 of Clifford Boram. This model is reputed to be Franklin's last. Time was running out



The Franklin Series 10C

A Leader In Performance

A Short Study by Carl Doman

In 1922 every young engineer at the Franklin Automobile Company aspired to become one of the dynamometer engineers in Charlie Grimes' research laboratory. Charlie had come to Franklin in 1921 from McCook Field and had successfully sold management on the necessity of a modern laboratory. So you see, quite naturally, I jumped at the chance to be a co-dynamometer operator when Bill Gale, a young Cornell graduate and the number one engineer, needed a helper for a day or two.

Charlie Grimes in later describing my efforts to Ed Marks, then Assistant Chief Engineer, remarked, "Carl apparently knows what he is doing, but he fails miserably as an artist. It is most difficult to read his data sheets." However, apparently my humble efforts showed promise and I became the chief co-dynamometer engineer, with Bill Gale the leader. Later when Bill entered the sales end of the business as a Dodge dealer, I became the chief dynamometer engineer, a nice-sounding title. Actually, I continued as a combination engine mechanic, dynamometer operator. data taker, computer, and curve plotter.

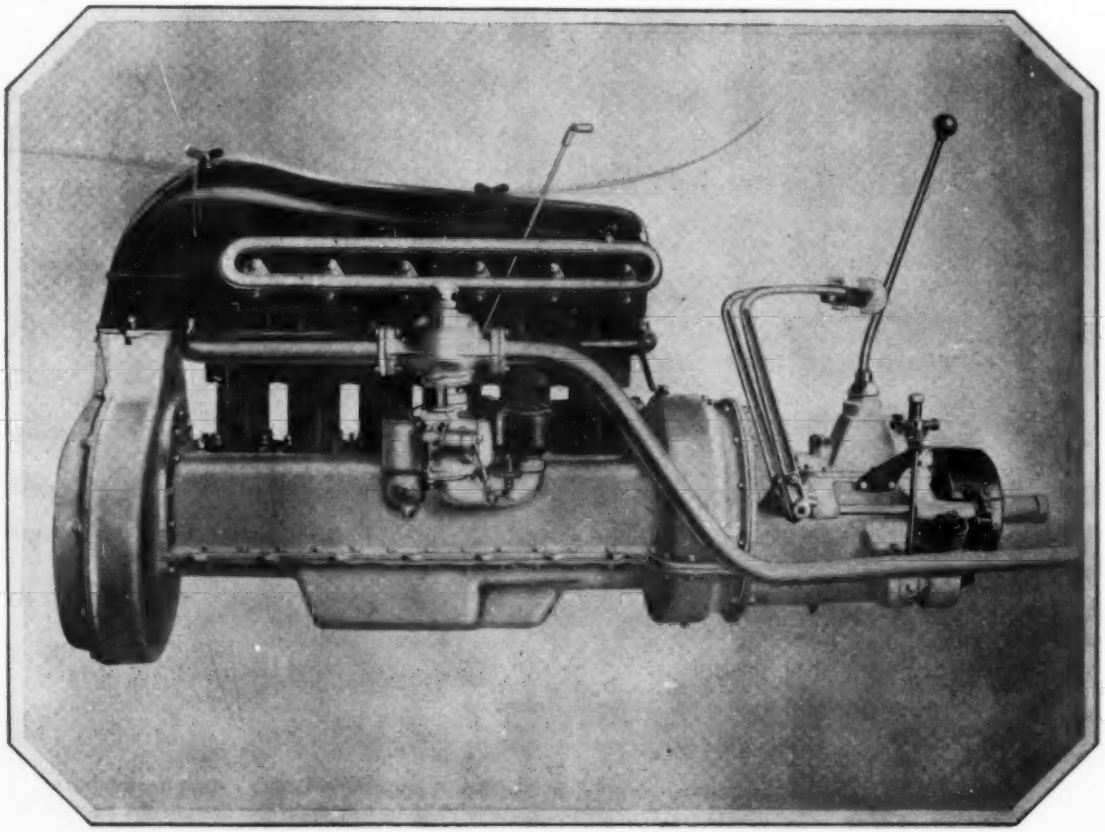
It was during this period that Charlie Grimes became interested in the possibilities of using a carburetor manufactured by such suppliers as Wheeler-Schebler, Rayfield, Swan and Stromberg.

Quite naturally, Charlie ran into quite some resistance from John Wilkinson. Mr. Wilkinson had designed all the carburetors used in every Franklin car produced since the company's inception. Furthermore, it was rumored that Mr. Wilkinson received a royalty of one dollar per car. But, more important, Mr. Wilkinson was convinced that the Franklin carburetor was more economical due to its peculiar design. Therefore, Charlie Grimes' initial dynamoeter work with other makes of carburetors was kept quite secret. Possibly it was for this reason that the Grimes Research Laboratory was located in the far corner of one of the new buildings where few "important people" visited.

Charlie Grimes, quite naturally, leaned toward the Wheeler-Schbler carbuertor because at one time he had an important engineering position with that company. However, as impartial dynamometer tests continued, it became apparent to Charlie Grimes, Louis Stellman (Chief Engineer), Ed Marks, and Ralph Murphy that the Stromberg plain tube carburetor had the most promise. My first job in the research laboratory was to witness and record the most important test of the Stromberg carburetor on a Franklin 10B car.

During these tests, basic data was recorded, such as:

Dynamometer load in pounds.
Revolutions per minute
Fuel flow—time for ½ pint.
Air temperature entering carbuertor — °F.
Exhaust system back pressure "Hg.
Oil temperature °F.
Cylinder bore temperatures °F.
Cylinder head temperatures °F. — bridge between valves
Spark plug boss temperature °F.
Manifold depression "Hg.
Air flow — fan — cubic feet per minute
Air pressure inches of H2O
Horsepower absorbed by fan



Friction horsepower
Corrected B.H.P. (Brake horsepower)
Corrected I.H.P. (Indicated horsepower)
Specific fuel consumption — lbs. per B.H.P. hr.

After the data was plotted and reviewed by Mr. Grimes, he concluded that several important problems would require major modifications in the engine before it could be put into production, and designated as a successful new model, Series 10C.

These problems were:

1. Overheating — cylinder head and spark plug boss extremely hot.
2. Excessive exhaust system back pressure.
3. Ignition distributor curve required serious changes.
4. Carburetion required many changes.
5. Cooling fan absorbed excessive power.
6. Pistons—had tendency to stick, causing excessive friction.

Conferences were held with key people from Manufacturing, Purchasing, Service and Engineering. After considerable study, it was decided to attack these problems as follows:

2. **Overheating.** This resulted from the inability of the cylinder to dissipate to the cooling air the added heat resulting from the increased power output. The power output resulted from better breathing from the Stromberg carburetor which, in turn, passed more fuel (gasoline). Since approximately only 25% of the fuel at 4.25 compression ratio generated useful power, 35% was dissipated by the cooling air, or radiation, and 40% through the exhaust. In an attempt to supply additional cooling, the steel fins cast into each cylinder were lengthened 1¼". Thus each cylinder had the following surfaces exposed to the cooling effects of the air from the fan:

40 cooling fins 6" x 13/16"	390.00
2 cooling fins 6" x 7/8"	21.00
4 cooling fins 6" x 19/32"	23.50
2 cooling fins 6" x 13/32"	9.75
4 cooling fins 6" x 1/4"	12.00
Outside area (# x 5.675 x 6) 40/52	82.30
Inside area (# x 5.55 x 6) 40/52 — 1/16 x 40 x 6	65.40
End of edge areas	11.20
Area of cylinder head and extensions	49.27
Area of cylinder barrel and lower flange	98.60
Total radiating or cooling surface per cylinder	761.92 sq. in.
Total radiating or cooling surface per engine	4571.52 sq. in.

It was later found that the lengthened fins did little to reduce cylinder operating temperatures since the increase in area was in the wrong position. It should have been added to the combustion chamber area. It was found in the development of the 1930 Series 14 Franklin side draft engine that only 27% of the energy to be cooled passed off through the cylinder barrel cooling surface. 73% was picked up by the cooling air as it swept the cylinder head cooling surface.

2. **Exhaust Back Pressure:** Back pressures of 12" Hg. were found. When the engine was tested without the exhaust system, the brake horsepower output increased and cylinder temperatures decreased. It was, therefore, decided to design an enlarged cast iron exhaust manifold with a 2-inch steel pipe connecting it to the hot spot, a 2-inch steel pipe connecting the hot spot to the greatly increased muffler and tailpipe. When tested, the back pressure was reduced to 2" Hg., power was increased, and temperatures were better controlled, but never under proper control; they were too high.

3. **Ignition Distributor Curve:** During the dynamometer test it was observed that it was necessary to adjust the spark setting for each speed. Then when the points were plotted it was found that the curve was most unusual and not possible with a fixed setting, without a most complicated mechanism. A sensible compromise was reached on the shape of a spark curve which could be manufactured by Atwater-Kent without putting a possible serious service problem in customer hands.

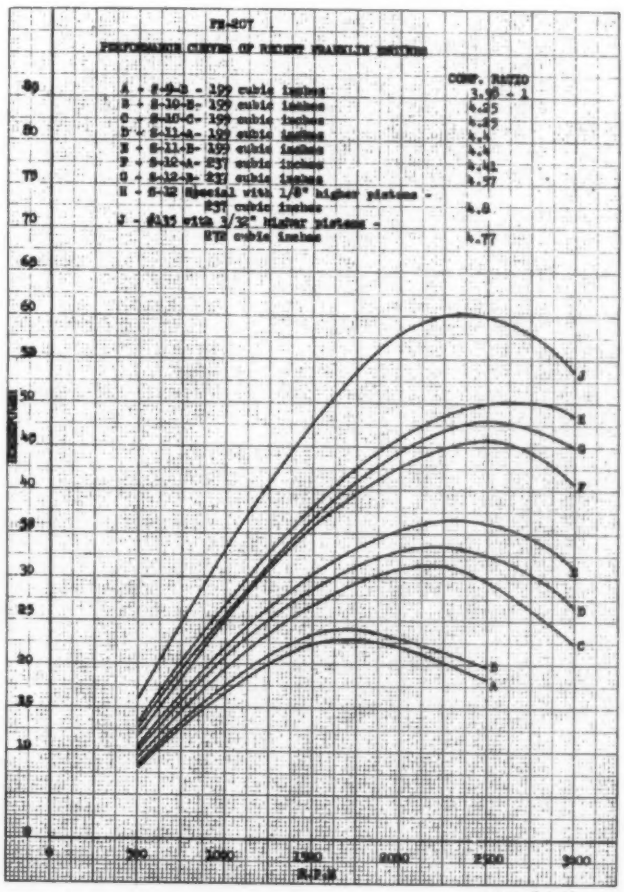
4. **Carburetion:** During the tests it was noted that the carburetor required frequent change in the setting of the high speed needle. The problem was attacked by Van Vorden, field engineer for Stromberg, and a temporary setting developed —temporary until road tests completed to the satisfaction of John Burns. (Note that carburetor troubles remain in 1958. I was told as a young engineer in 1922 that the piston, the bearing, and the carburetor were fully developed).

5. **Cooling Fan Excess Power:** The tests conducted by the research laboratory indicated a consumption of 11.7' horsepower by the fan at 3000 r.p.m. However, in 1929 with more accurate measuring equipment, a Series 13 fan was found to absorb 19.75 h.p., so it is safe to assume that the Series 10C engine, with more restricted passages, consumed 15 h.p. at 3000 r.p.m., or 60 m.p.h. Fortunately, the car's top speed was 53 m.p.h. so the fan could never take its toll in power consumption except down a steep hill.

After conferences with B. F. Sturtevant and The American Blower Company, it was concluded that nothing could be done to reduce the power without a major research and tooling program. (Note that the answer was found in 1929 and 1930).

6. **Pistons Sticking:** With the increased power, the pistons naturally operated at higher temperatures, possibly 100°F. more. These increased temperatures caused the pistons to expand a greater amount and often scored. Fortunately, E. C. Long, a real piston expert, analyzed the problem and developed a piston which solved the problem, until the compression ratio was later increased and greater demands were made for more poewr. In 1923 I believe that Mr. Long's contribution permitted the engineering department to release the Series 10C without reservation—a truly great Franklin car.

While dynamometer work continued, a test car was assigned to the Grimes laboratory for road checks. Experience showed then, as today, that dynamometer tests are not final. They must be accompanied by exhaustive road tests. Often a road test necessitated additional basic dynamometer runs. As an example a carburetor calibration developed on the dynamometer engine often gives poor operation on the road. Possibly the venturi is too large, giving a velocity to the air-fuel mixture which is too slow, then hesitation persists on acceleration. Such situations, selecting smaller venturis and repeating the dynamometer tests for effect on power, engine operating tests, etc., are normal development routine.


FH-207
PERFORMANCE CURVES OF RECENT FRANKLIN ENGINES
COMP. RATIO
A - 3-9-3 - 199 cubic inches 3.98 - 1
B - 3-10-B- 199 cubic inches 4.25
C - 3-10-C- 199 cubic inches 4.27
D - 3-11-A- 199 cubic inches 4.4
E - 3-11-B- 199 cubic inches 4.4
F - 3-12-A- 237 cubic inches 4.41
G - 3-12-B- 237 cubic inches 4.77
H - 3-12 Special with 1/8" higher pistons - 237 cubic inches 4.8
J - 4135 with 1/32" Higher pistons - 272 cubic inches 4.77
J.P.F. 8-1-28

For a moment I will divert our attention to some of the "test" trips around Oneida Lake. Charlie Grimes was a scientific fisherman, not necessarily a good fisherman. He had located, so he thought, every fishing hole on the lake and had plotted each hole on a beautifully prepared map. The maps were freely distributed by Charlie, but few friends were ever successful in finding the fish. The complicated directions consumed so much time that little time remained for fishing. Except Charlie and his wife Pearl at least claimed great catches of Oneida Lake pike. Did they catch them???

Now we will return to the serious side of road testing and associated problems. We mentioned the need for a muffler with low back pressure. Finding such a muffler was quite simple. The Powell Muffler Company was located in Utica, New York and Mr. Powell, the President, and the engineer, was most cooperative. But one other essential in a muffler was demanded—silence. Try and try as Mr. Powell and John Burns did, no sufficiently quiet and low pressure muffler evolved. Days went into weeks, but no success. Finally, the typical Series 10 muffler "boom" was accepted and the sales department immediately associated this noise with power, speed, advancement and engineering refinement.

The Franklin Series 10C, for its day, was a great performer. It had a limited top speed of 53 m.p.h., but it could be driven at that rate hour after hour while its mighty competitors could better it by 10 m.p.h. Yet driver fatigue with the larger and more cumbersome cars soon forced the driver to slow down.

While Charlie Grimes and I did much road work, the final acceptance, as always, rested with John Burns. From the few records, I find the following Burns tests:

1. Mail Box Test (Morey's Cider Mill)—5 m.p.h. to 16 m.p.h.
2. Sanitarium Hill—start 30 m.p.h. at white fence, shift at sand pit.
3. Lord's Hill—2 mile climb—shift 1 mile up.
4. Speed test—bath tub—53 m.p.h.
5. Speed test — State Fair Boulevard — both ways — 53.5 m.p.h.
6. Acceleration—good.
7. Starting—15°F.—satisfactory.
8. Valve noise (.010" cold)—satisfactory.

When John Burns marked "O.K. John Burns", it was a great car.

Charlie Grimes was a great teacher. He taught me the fundamentals of air flow, air measurements, heat dissipation, fan design, manifolding, engine balance and associated subjects.

We were never satisfied with the smoothness of our engines. We studied piston weights. We agreed on limits and I guaranteed to bring each to the same figure by riveting on small strips of copper. When the job was finished I "ran in" the engine for four hours, then demonstrated to Charlie as he looked over my shoulders at the loaded engine. He congratulated me (as was his custom with young men) and went to his offce. I continued testing for a few days, constantly being thrilled by this super smooth engine, until I decided to tear it down for a cylinder change. Then, to my surprise and chagrin, I found all the piston balance weights in the engine's oil pan. No, I did not advise Charlie. Possibly he knew that the rivets would not hold the loads developed with an engine turning up to 3000 r.p.m.

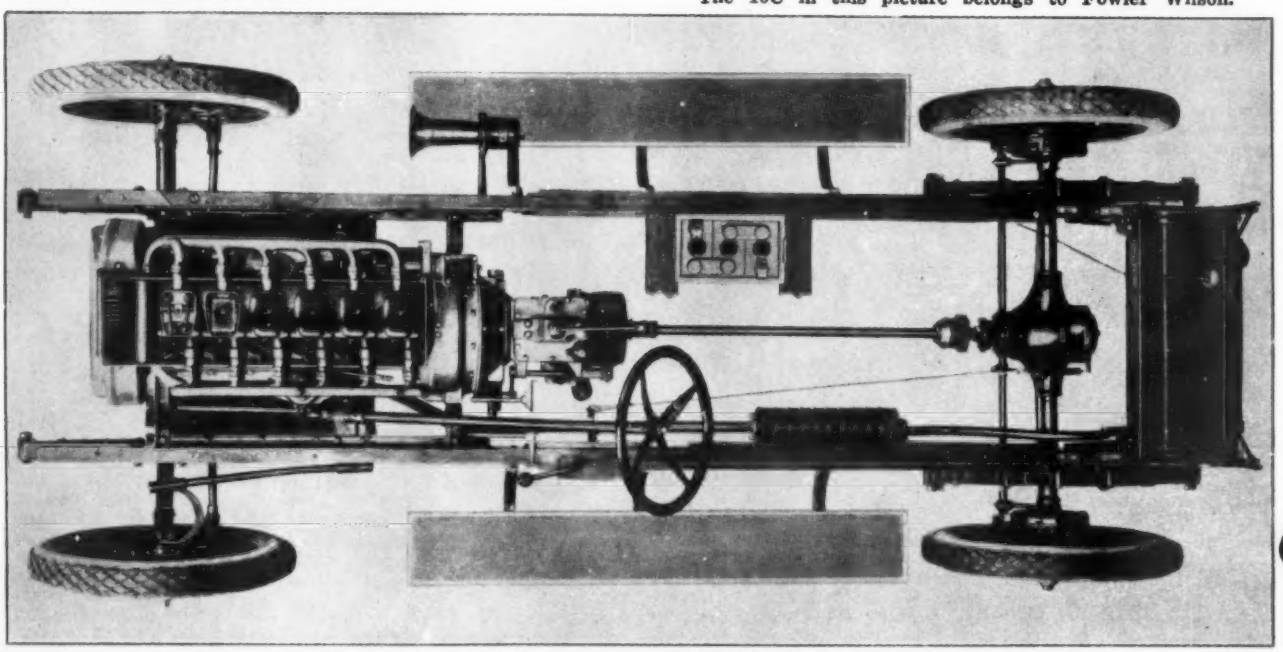
Charlie was a crank for details. Compression ratios were to be adjusted to the same figure for all cylinders. While tolerances permitted a range of 4 to 4.5:1 compression ratio, Charlie demanded 4.25:1 ratio.

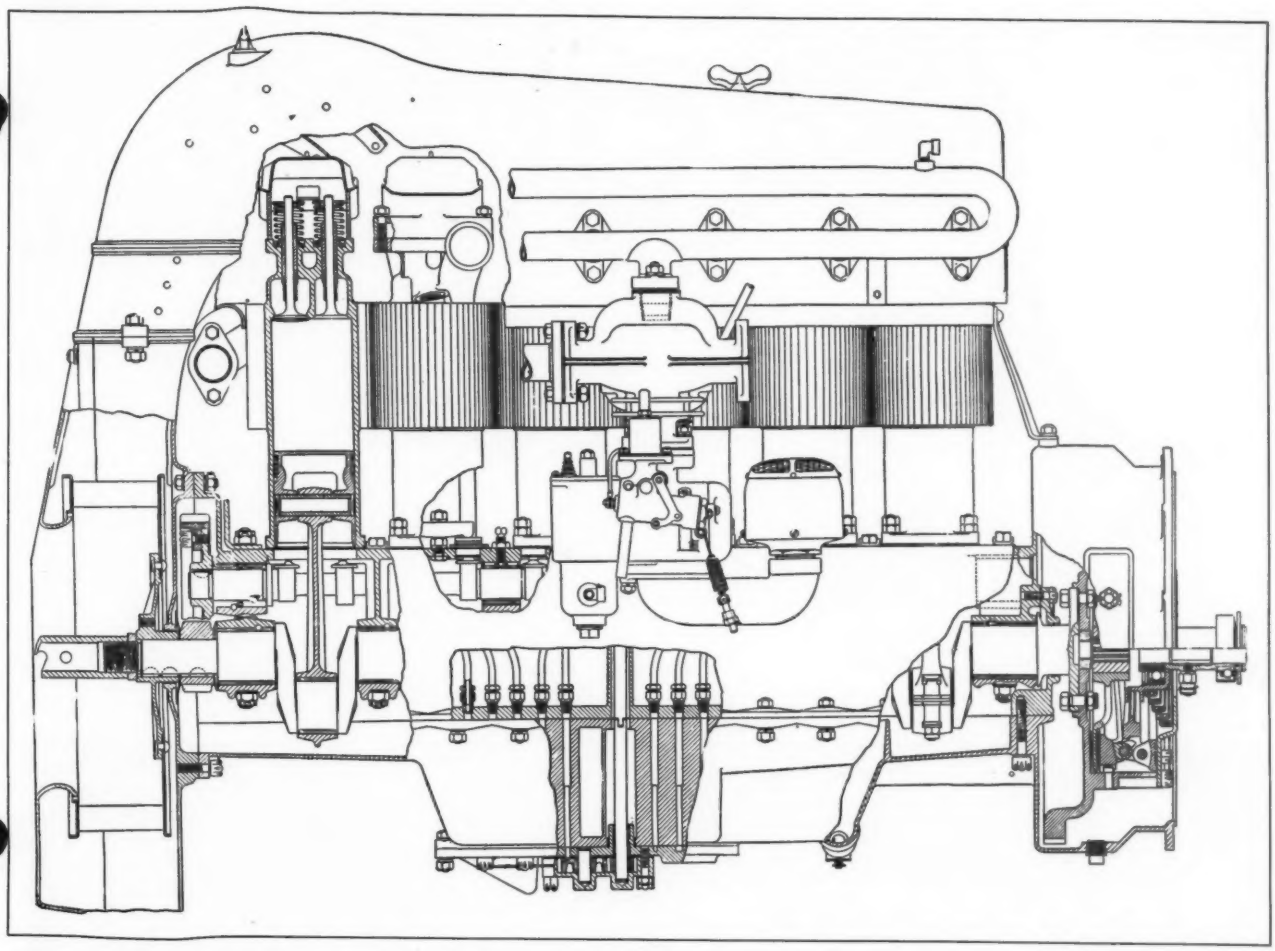
To adjust to this figure it was necessary to very carefully measure with a burette the oil necessary to fill each cylinder with the valves closed and piston at upper dead center. Then paper shims were used under the cylinders as needed to bring each cylinder's compression space or, as it is more correctly called, clearance volume to the desired figure.

In the midst of one of these operations, Charlie Grimes phoned to tell me to get the engine ready to demonstrate to Mr. Stellman (Chief Engineer). In my haste, I neglected to remove the measuring oil. I installed the spark plugs, pressed the start button on the dynamometer panel, and the engine made a partial revolution. Then a major explosion occurred. Two cylinders broke at the base. The oil left in the cylinder caused a hydraulic lock and failure. Needless to say, I was embarrassed. I offered to quit, but Louis Stellman just grinned, slapped me on the back, and I was left to my misery.

Charlie Grimes and I continued our efforts to obtain more power, but limitations presented themselves. Cylinder cooling was very marginal. The cylinders lacked breathing ability or had low volumetric efficiency, as it is now called. It needed more effective cooling surface, preferably copper fins and twice as many fins. It needed larger intake valves, as the diameter was only 1-5/16", or the same as the exhaust valve. We dreamed of removable cylinder heads to permit the installation of larger intake valves. Had we known, we could have increased the intake valve by 3/16" and decreased the exhaust valve by 3/16". This theory that an intake valve could be made larger at the expense of the exhaust valve was proved most dramatically in the development of the Series 14 Franklin engine. It was also followed by Aircooled Motors Corporation in the design of the Franklin aircraft engines. I can say

The 10C in this picture belongs to Fowler Wilson.





Cross section view of engine showing working parts. Note oil leads from pump through casting of oil reservoir to engine base where pipes are attached. This does away with work of disconnecting all oil pipes when removing oil reservoir from engine. Also note the construction of the front end fan housing and how it forms cheek piece to cam sprocket housing. A good idea of the construction of the clutch is also obtained from the drawing.

without fear of contradiction, I have never seen an intake valve too large or an exhaust valve too small. Unfortunately, we did not realize this in 1922 - 1923 during the development days of the Series 10C or, in fact, of the Series 11A.

Any discussion about power plants would be amiss without including power—the brake horsepower figures which everyone throws around so lightly these past few years. But horsepower was not discussed loosely in 1922 or 1923 or, in fact, in any of Franklin's days.

It is customary to study power curves, so I refer you to P.E. 207 a duplicate of the one plotted in 1928 by John P. Flannery (now Chief Engineer of Easy Washer) from data available at that time. Here you will see the Series 9B developing net 22.7 h.p. at 1750 r.p.m. and the 10B developing net 24 h.p. at 1750 r.p.m. In other words, there was little increase in power with the Series 10B blower-cooled engine over the Series 9B, a suction-cooled power plant. However, the 10C shows an output of 31.5 h.p., an increase of 31% from the use of a better breathing intake system (chiefly carburetor) and an exhaust system of less back pressure.

The other curves are self-explanatory, except it should be properly emphasized that Franklin never was content and continuously pressed on for greater and greater performance through better design.

Often "water-cooled" engineers ridicule the apparent low output of Franklin engines of the early twenties. However, I always point out that these curves represent honest power outputs. They represent power under installed conditions, with complete exhaust system, with air cleaners, with locked spark setting, with set carburetor setting, with its own cooling system, and on a continuous run at each test speed of approximately 20 minutes.

As an example, we will study the output of the Series 10C if the procedures used for testing in 1958 were used in 1923:

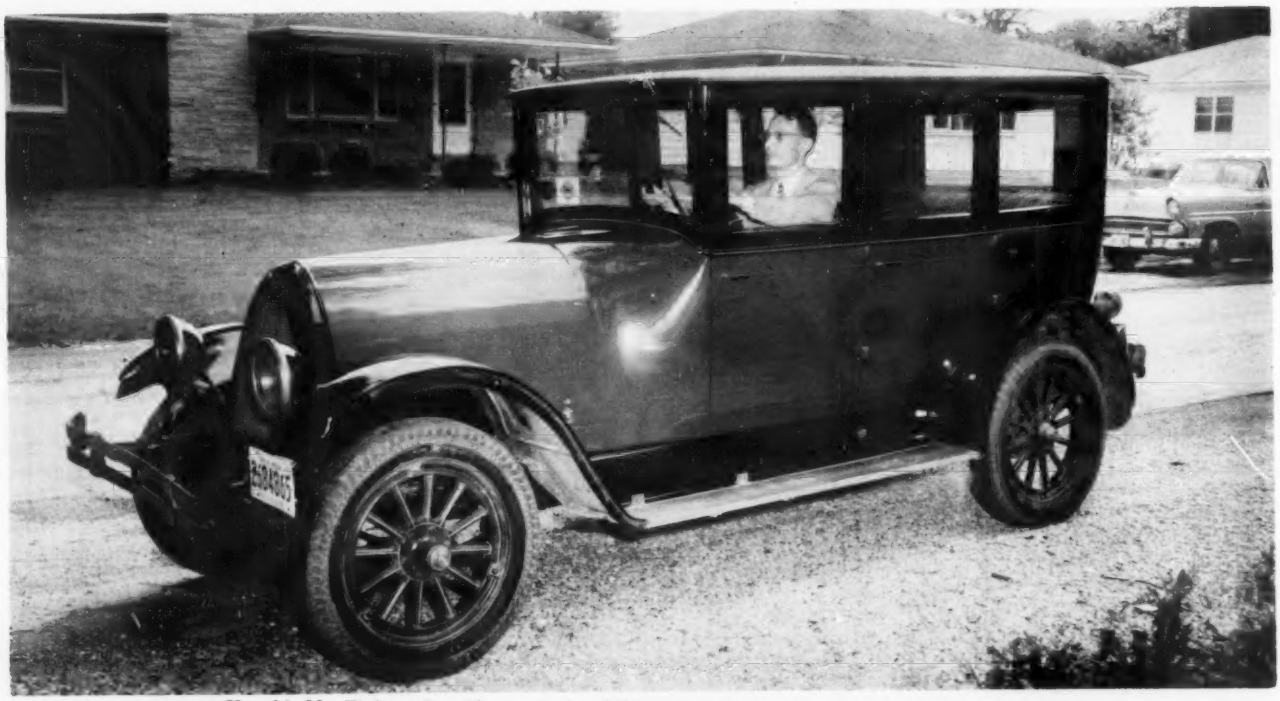
B.H.P.—Series 10C—2500 r.p.m.	31.5
Increase from free exhaust system	5.0
Increase from no air cleaner	2.0
Increase from variable spark setting	1.5
Increase from variable carburetor setting	1.5
Increase from elimination of fan load	8.8
Increase from flash tests	2.7
Increase from barometric corrections	1.5
Total possible b.h.p.	54.5

The Series 10C engine, it is recalled, had 3¼" bore and 4" stroke, giving 199 cubic inches. This displacement was continued in the Series 11A and the Series 11B. With the introduction of the Series 12, the stroke was increased to 4.75". When the Series 13 was developed, it incorporated 3½" bore, with the stroke remaining at 4.75".

Assuming that the Franklin engineering department was in action now in 1958 and was assigned the development of a 199 cubic inch 6-cylinder in-line engine, its general specifications would be approximately as follows:

Bore	3.875
Stroke	3.00
Compression ratio	9.50
Fuel required (octane)	93.00 plus
Fuel consumption (Lbs. b.h.p. hr.) (best position)	.45
Maximum power speed (r.p.m.)	4200
Maximum b.h.p. (1958 standards)	138

(cont'd on page 19



Harold M. Finley, President of the Midwest Region, in his 10C sedan, taken on his driveway at Lockport, Illinois

This fine picture of a 10C at a 1942 wedding is from Mr. Franklin's own albums. The occasion is not identified and it is hoped that some reader may recognize the car and the wedding party

LEFT OVERS

Any cook, worth the name, can clean out the icebox by taking a dab of this, a pinch of that, add a cup of milk and turn out a durned good dish, usually even giving it a name. But editors just aren't cooks. When an editor looks into his refrigerator and sees the stuff that he hurried some poor bird into doing and then hasn't yet used he gets almost conscience stricken, not actually for an editor cannot afford a conscience. Most of these interesting assorted bits have been in the "icebox" a scandalous length of time, one is really quite new, several were intended for the last issue but there simply was not that much space.

The '28 and its interested corps of inspectors was taken during the opening of the Baltimore Harbor Tunnel early this year. This car was driven by "Wild Bill" Thompson, a Baltimore member who carried member Frank Ober as copilot. Frank Ober had suggested a title from the remarks he overheard at this point. We will list a few of them and you pick your own title. "Man, ain't that some moto', huh?", "Look at the size of that water jacket!"? "Is that a steam engine?" They just have to spill water on it somewhere according to the cop...

Franklin 10C - -

- - from page 17

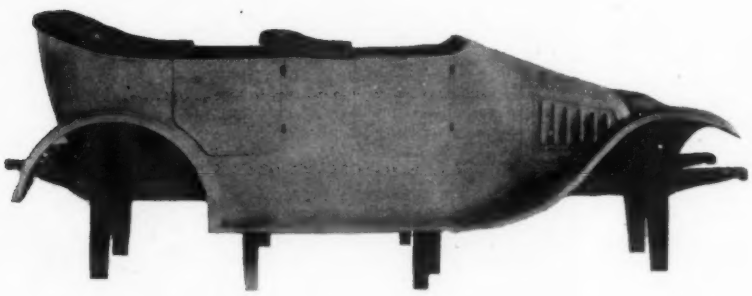
Structurally, the Franklin Series 10C could not have developed outputs approaching the above. While octane ratings in 1922 to 1923 were only in the 50 octane range, had there been the system for measuring anti-knock ratings, the bearings, the duraluminum connecting rods, and the individual cylinders could have not have handled the loads. While the crankshaft had 2-inch diameter journals and was supported in seven main bearings, the bearing materials were simple babbitt. The connecting rods were duraluminum forgings, with the babbitt cast direct to them.

The inadequacy of the bearings was suspected with the production of the Series 11B. In the Series 12, the fully counterweighted crankshaft, for all practical purposes, eliminated main bearing troubles. But connecting rod bearing troubles continued until steel back babbitt inserts were incorporated in 1932.

To return to the Series 10C cooling deficiencies, we must realize that the 10C faced a period of no further power increases. The 1923 to 1924 recession checked all major development work until I helped sell management on permitting us to experiment with casting 104 thin copper fins into the molten iron in the mold. This was done after Franklin had canceled suddenly its joint development work with the General Motors Corporation on the welded or brazed-on copper fins. (Possibly this could be an interesting story for a future issue).

The cast-in-copper fin procedure gave a cylinder with a total of 1265.75 square inches of cooling surface. This permitted compression ratios to be increased to 4.4:1 on the Series 11A; with the Series 11B a Swan type of induction system was incorporated. This increased the net brake horsepower to 36.5, with a marked increase in fuel economy, improved cold starting and improved smoothness. With the increased power, cylinder temperatures decreased over those of the Series 10C. At last Franklin had been able to master the cooling problem, temporarily possibly.

The Series 10C Franklin did a yeoman job in lifting itself from the classification of an old man's car. Under today's standards, of course, it would not measure up, yet it demonstrated time after time that Franklin direct air-cooled engines actually were great performers; they were, as before, economical on gasoline; they did not burn oil; and they gave marvelous customer satisfaction. The 10C pioneered the later developments leading to the high output Series 13. Series 14, Series 16, Series 17 (12 cylinders), and the Series 19—the last of the great line of Franklin, the name which had contributed more to the development of the modern motor car or motor truck than any other.



European Editor van Groningen recently sent an article written by member Laurence Pomeroy of England that appeared in The Motor of January 15, 1958. In this well written story Mr. Pomeroy traces the development of the all steel automobile body that was pioneered by Edward G. Budd of this country. The Dodge Brothers four of 1916 is generally accepted as being the pioneer in adoption of this later almost universally used construction. Of interest to us is the photograph of the proposed body design along Franklin lines for Dodge by the Budd organization. It is of course well known that Dodge Brothers did not choose this interesting design but produced their well known, squared off, clumsy looking but very excellent little car.

Another little known tie between Dodge and Franklin is that John Wilkinson was the designer of the Dodge Victory Six engine.

Body by Philips - -

- - from page 10

The body before final finish coat went to the trim department. Here the seat springs and back springs were trimmed and mounted in the body. The springs were covered with real hair and top of hair pads not rubber sponge as is used today. The interior was trimmed with head cloth usual plain. Cloths for trim were usually special and purchased from William Wiese, located in New York City. Production run cloths were purchased from the mill and usually two different designs were furnished. The seat and back had stripes usually. Exterior of top was cotton batting spread over the frame then leather or manufactured top material to resemble leather pulled over it. The nailing was covered by the use of aluminu. molding.

The Chassis should be in the plant ready to mount the body. Any painting or work necessary on the fenders had been done by the metal department and paint department. At this point the body was finished. Trimmed and finish painted. The body was raised up and the Chassis run under and body lowered on the Chassis. First problem was to level this body on the Chassis. This was done by use of cork shims made by Armstrong Cork. This was put between sill and Chassis frame at point where body bolts were located to hold body to the Chassis. The bolts were pulled up and double nuts applied. The doors were checked to be sure even all the way around, gauge used. Also checked that doors closed and opened easily and struck the striker plate squarely. The dash was set in and the hardware installed door handles, dome lights, window regulator handles and floor matts. Car was then cleaned up of all finger prints and any necessary touch up done and ready for deli

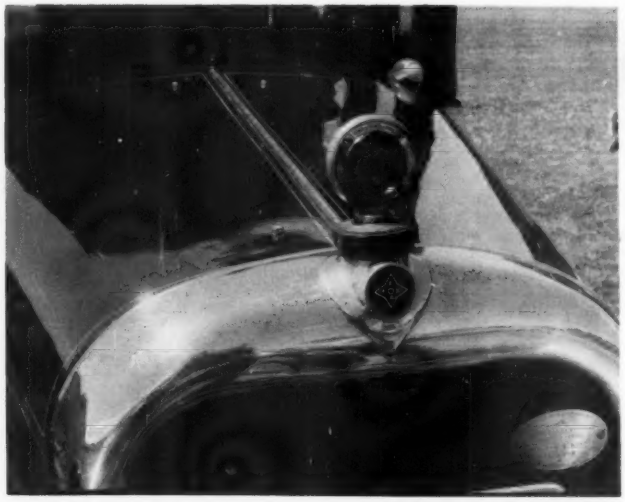
Ventilators were installed in the metal department and they were cast aluminum purchased out of Cleveland to our specification.

Majority of the business was done to special order. A car agent buying four or five of a certain style body. We would release these for production as he sold them. Colors were specified by him and trim was within a certain yard price. If his customer selected sample more expensive price went up accordingly. We had the chassis delivered to the plant direct from the factory and body was mounted and wiring assembled at the factory in Warren. Many buyers came to the factor and drove their cars away. Other dealers sent their own drivers in to drive cars to their agency.

Bodies were of all types, coupes, sedans, town cars, roadsters. and convertibles. Philips Body Company made the first collapsible four door body. The center posts folded down on the back of the front seat when the top was down and collapsed so it did not obstruct rear view. Today the center post is out and many engineering improvements resulted. Some bodies were designed and sold to companies as samples to be later used for production of standard lines. The companies paying for the samples according to the new ideas. Now th have extensive engineering and design department that check the public wants. (You must remember auto bodies were in those days, not as complete as competition has developed) Stock cars were nice but no large choice of style or colors and that is where the custom auto body manufacturer fitted into the picture. As the auto manufacturer expanded, in those days, his body design died out. The all steel construction got in the picture with Fisher, Budd and body plants owned by the larger auto manufacturers.

There were several other custom body manufacturers. for example, Le Brun in New York City. They made town cars, chauffeur driven limousines, five and ten passenger cars. I just remembered another thing that might be of interest t you. Riddle Company in Ravenna made hearses for the horse drawn days and for awhile made them to order for dealers and auto companies. They closed up the business and we made many for various types of cars. In those times they were not as ornate as the horse drawn nor were they as plain as they are today. The interiors had really beautiful trim and accessories as they have today.

A letter from member George A. Kipp of Niverville, New York, tells a little about his 1923 FOX and the wild ride home from Strassburg in the car at the, none too tender, mercy of Kipp, Jr. The picture of the FOX "radiator" and accessories indicate that they went even farther than Franklin in trying to hide their birthright.



"We enjoyed the meet and trip immensely. Already planning on next year when I hope to take the 1914 Roadster, Series 5, restored or not. Am enclosing a picture of the car. It is 18 volt electric system. Serial #18208 — Motor #25876.

I discovered the Fox car in Lancaster, Pa. It had 8600 on the speedometer, now has 12,000. It has a unique Boyce Motor Meter. The mercury tube leads down to # 1 and 2 cylinder. The heads are removable, and ground joint. Overhead camshaft with 5 bearings under oil pressure. Valves are Intake 1 7/16, Exhaust 1 11/16. Tires 32 x 4½. Wheel base 132". Cruising speed 45 to 50 MPH. Weight 4,000 pounds.

Mrs. Kipp and I went to Lancaster expecting to tow bar the Fox in, but found we could not use tow bar because blower housing was too close to tie rod, so hired a driver from the garage to drive my car and started home, 294 miles.

About 40 miles out had my first trouble, ignition wires from magneto shorted, left me 4 cyl. Stopped at garage and took care of that and started on my merry way. Forty-eight miles more, a rattle, and one rod out. There I was 206 miles from home. What to do? Took tow bar and remodeled it, hooked on rod that ties the frame on front end, took driver from DeSoto and put him in Fox to steer. Reached gas station, called my son giving him the route we were traveling and had him meet me at Strassburg, where I waited a half hour for him and his wife. Sent the driver back to Lancaster by train.

I jumped in to steer the Fox, behind the DeSoto. What a ride that boy of mine gave me. Had his father where he wanted him. No chance for an argument, I was behind. Hit the Thruway at 55 to 60 MPH, behind the DeSoto. Wondering which tire was going to blow. No brakes. No tire blew but I did when we stopped. We all arrived home tired but safe.

After a couple days pulled the crank case down, found it had insert in the rods. Soon had it running. I think it is a wonderful car."

Memo from: Fred D. Hayward PAR... CALIFORNIA

HORSELESS CARRIAGE CLUB OF AMERICA

215 NORTH LARCHMONT BLVD. • LOS ANGELES 4, CALIFORNIA
HOllywood 9-7738

9.17.57

finally got the word on the L.A. County Museum FRANKLIN from Ranson Matthews. You'll recall I sent you the photo a few months ago.

After Ralph (the L.A. FRANKLIN Dealer) Hamlin did so well in the 1912 L.A.-Phoenix road race, he took the car to the Earl Carriage Works to have a special body built. It was much more attractive than the regular FRANKLIN body, and attracted much attention. A Mr. W. L. Valentine, a L.A. financier whose family still control some downtown department stores, order a duplicate of the Hamlin car, and this is the car in the museum now.

It is identical with the Hamlin race car chassis except that the Hamlin car had no starter motor, and the Valentine car, being a late '12 does have a starter. Hamlin somehow lost the original car, but in later years secured the Valentine car, and loaned it to the Museum.

Incidently, the present head of the G.M. styling section is a decendant of the family who built this body.

Sorry I was so long in getting this to you.

Best regards,

Fred

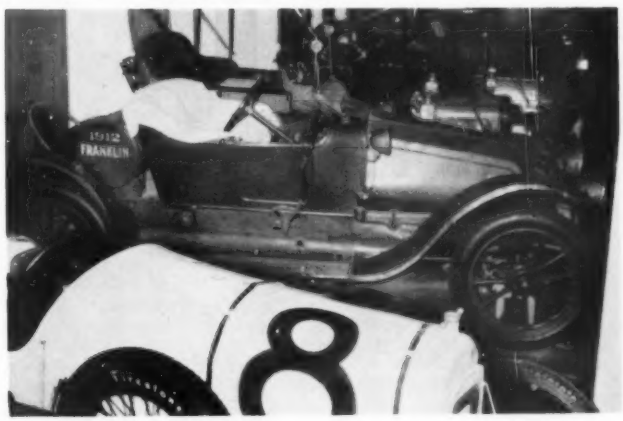
Founded 1937

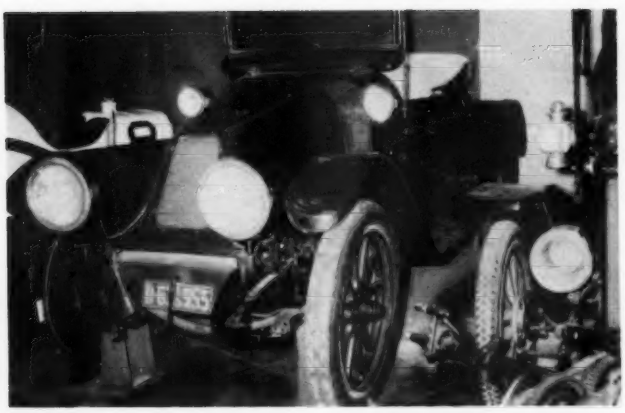
DEDICATED TO THE PRESERVATION OF THE HISTORICAL AUTOMOBILE

These pictures of the 1912 runabout certainly bring back memories to me. A couple of years after Ralph's Desert victory I visited his Los Angeles establishment to have a bit of tune up done on the D we had driven across the country. I was pretty young then and Ralph took his place among my authentic Franklin heroes along with John Burns, Clayt Carris, L. L. Whitman, John Wilkinson and a few others. I think I was surprised to find that Hamlin only had two legs like the rest of us!

I remember that beautiful showroom panelled in eucalyptus. There was a door leading from this room into the downstairs part of the shop, right alongside this door, on the shop side, were parked two fabulous cars, one was the Desert Racer already sporting the modified runabout body as in these pictures. Ralph very kindly permitted me to use this car occasionally while I was temporarily "unhorsed". It is not hard to imagine the thrill this would give a young buck, to drive around in the "very" car that won the famous race. Sitting next to that car was the most beautiful raceabout I have yet seen, original or restored. Ralph had built this raceabout on the chassis of a wrecked Series 4, to my own mind Franklin's top piece. This car had wire wheels, and of course no fenders, painted red, the customary large tank and trunk on the deck, steering dropped and controls modified for easy reach, a monocle on the steering column and the dash, contoured to hood proportions, was sloped clear to the floor, a la Mercer, with the pedals coming through the dash itself. This gorgeous dash was made from two alternatingly matched panels of the same wood used in the showroom. Hamlin also let me drive this marvelous car occasionally. I am sure that I did nothing to hurry Ralph's people into finishing our prosaic old touring car.

Once again, after all these years, thank you, Ralph Hamlin, for those moments of glamour. . . . AHA.





The Middleby - - from page 3

An interesting, if short lived car, beginning in 1909 and closing in 1912. It is unfortunate that little of the history of this car seems to have been preserved. At Mr. Becker's urging the Historical Society of Berks County has made some search but so far have come up with little. There seems to be much confusion in the story of this car, from various sources we find that Charles M. Middleby of Conecticut, George W. Middleby, of Massachusetts and Joseph Middleby from an unmentioned state are all listed as having bought the old Duryea works in Reading. The April 1939, Vol. IV, No. 3 issue of THE HISTORICAL REVIEW OF BERKS COUNTY contains the following bit from "The Automobile Industry in Reading" by Byron A. Vazakas. The quoted magazine is the journal of the Historical Society:

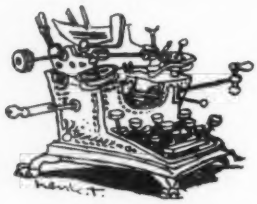
After Charles Duryea discontinued manufacturing cars in reading in the month of March, 1908, his plant and equipment on River Road were taken over by Charles M. Middleby, from Connecticut.

Duryea himself, however, did not return immediately to the West, but operated for several years at 32 Carpenter Street as an auto ergineer, continuing, no doubt, his automotive experiments.

In addition to Mr. Middleby, other officers of the new company were L. G. Lauther, Superintendent in 1910; W. E. Brown in 1911, and G. A. Nystrom, who was Manager in 1912.

Middleby copied Duryea's air cooled motor, and patterned his machine after the Franklin both in body and motor. The Middleby Auto Company discontinued business in 1912.

Here we will leave this interesting car and its story to some more thorough and more patient researcher.



Comments and Letters

This letter from member LeRoy V. Badgley of Summit, New Jersey, was received shortly after the Trek. While probably most of us were entirely unaware of anything unusual in our acceptance of a likeable Trek newcomer both the elder and the younger Badgley were greatly pleased with the affair and the younger man has since become an HHFC member as well as his father. It is altogether one of the nicest letters ever to come to the Club.

"I hope that sometime you may find a little room in the ACN to let me thank you and all those good members who so generously took my son, Roy, to their hearts on the last Trek. We will never forget the kindness and fellowship shown him —particularly the help, advice and suggestions to make our 9B touring a better car.

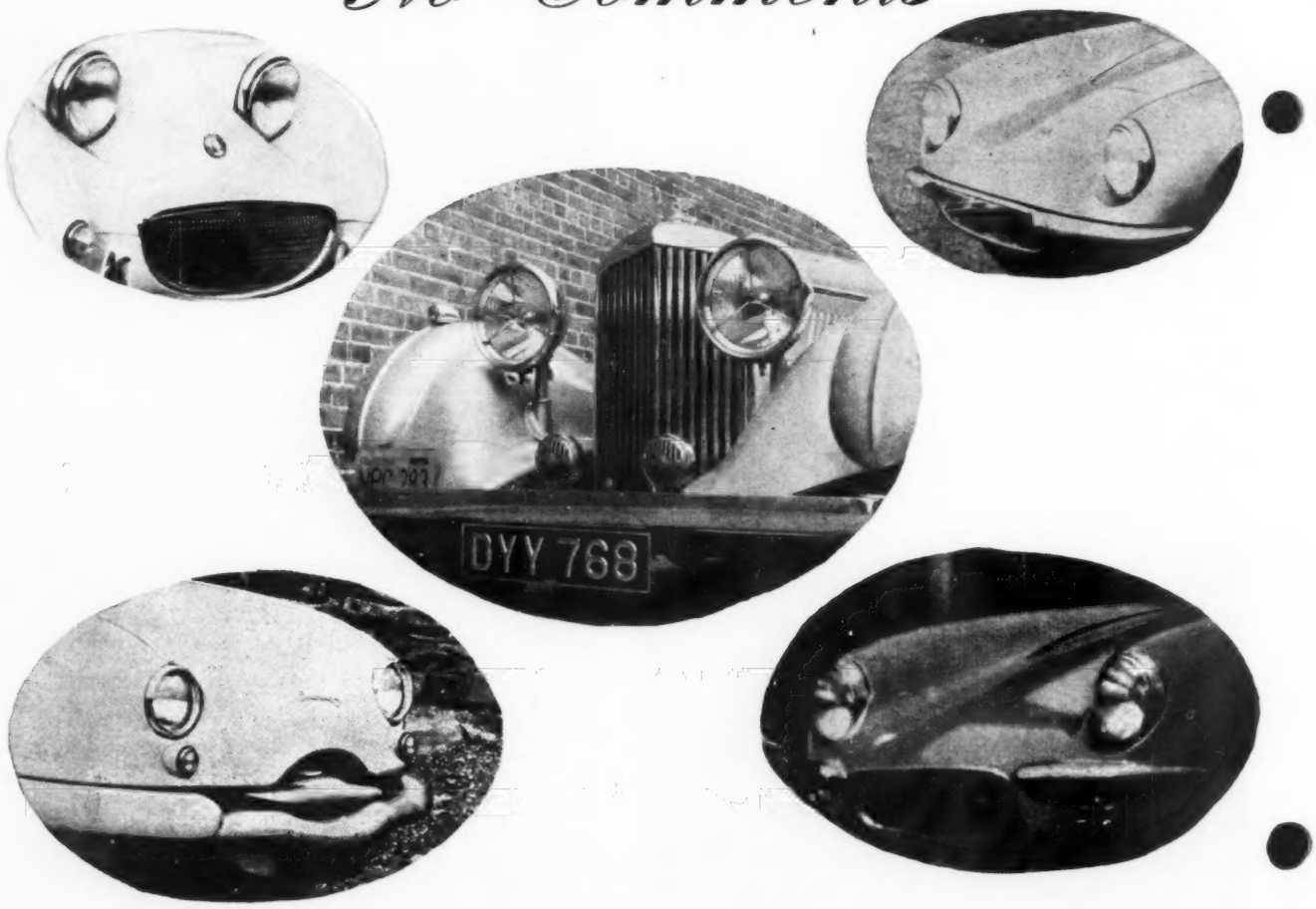
We had worked together furiously to get the car in good shape to make the trip, but at the last minute, I couldn't go. His own suggestion that he make the trip alone left some doubt in my mind—being just nineteen—but I felt his keen interest in old cars and his enthusiasm would promise a good time and good experience.

However, I hardly expected that a young newcomer would be received so eagerly as "one of the boys". To me this is a big feather in the cap of our club, and such an attitude will insure a continued good membership and a lasting interest in Franklin."

Hans van Groningen, whose English is purer than that of many of us, sent in a hand drawn and lettered greeting card that wished us, in Dutch, "A lucky and Prosperous New Year." We smugly used That as a New Year wish to the membership from the ACN Staff. We printed it so; Een Gehikkig en Voorspoedig Nieuw Jaar, but our Dutch, being of the strictly copying type, led us into wrongly reading "luk" as "hik", so what the Staff really wished for all club members was, "A Hiccuping and Prosperous New Year."

As a hicouping New Year is far from an unknown phenomenon we will let it stand as a proper greeting to at least some of the customers.

No Comments



John Burns Column

The John Burns Column was formerly personally conducted by the late Mr. Burns. In future it will be handled by a board of Franklin engineers and special experts who, out of their wide experience, will undertake to assist members with their technical problems. In addition it will from time to time, as before, contain tips and suggestions sent in by members.

All correspondence for this column should be direct with the Editorial Office at Cumberland, Maryland. You will be expected to furnish this office with copies of your questions and the answers for possible inclusion in this column.

MODIFICATION TO OILING SYSTEM

This is a quote from a Buchman answer to my question as to whether or not he advocated a change in any engine of the period which he might be rebuilding. . . . AHA.

"I would never think of leaving off the scoops on the rods, I checked the rods last Fall on the H and they were perfect. In the first place the amount of oil or oil level in the crankcase pockets won't have to be so accurate. I make the scoops about ⅞" long and if they dip at all that is very good or if they dip ⅜" to ¾" doesn't make too much difference, just as long as the whole cap does not touch you get the same amount at all times. Now on the 1911 (An engine on which he is working and on which my questions were based. . . . AHA) they run the oil lines to each main bearing (These are lines from mechanical oiler . . .A) to the rear of each rod or in other words each rod was fed from the main bearing just back of it and no line to the front bearing at all. Now it is a known fact that the oil splash has a tendency to work back more than forward. That is why they fit the jobs up with a hand pump at the dash (Do not think there was one on the 1907 . . . A) which only fed the front rod. If that was supplied all would soon have a plenty. Now I run the front oil line from the oiler to the front cheek piece bearing with a return oil lead to the front crank case pocket where the scoop picks it up. No. 2 oil line then goes to No. 1 of the three mains instead of to No. 2. No. 2 main now will get oil from No. 3 oiler and the fourth oil line from oiler will be left as it is to the rear cheek piece bearing. In other words all the oil is fed from front to back instead of from back to front, except No. 3 main has no lead at all and it does get the splash from both front and rear.

(I use these scoops on my 1905 cross engine, lubricates perfectly and entirely eliminates smoking. The scoops are simpuy short pieces of ⅛" pipe screwed into a hole bored in center of bottom bearing cap . . . rod, of course. . . bottom of pipe is cut at a 45° in direction of rotation. . . . AHA)

WHITE GASOLINE

The latest issue of the BULB HORN contains an excellent article on the preparation of an antique car for over winter or other long time storage. The author cautions that the so called "white" gasolines are not free from the vice of forming gum and recommends careful draining and cleaning as a preventive. This editor can vouch for the correctness of his statement. "White" gasolines that we have used do form gum, just about as badly as any other fuel.

MODERNIZING THE FUEL SYSTEM

Franklins beginning with Series 13 came equipped with a hydrostatic gasoline gauge, a device which is difficult to keep in accurate operation. This can be neatly replaced with an electric gas gauge, such as Stewart-Warner #D358E, available from most ignition specialists for about $9.95. The most inconspicuous installation can be obtained by removing the hydrostatic tubing apparatus and cutting a circular hole in the dial face to accommodate the new electric gauge.

A float unit will then have to be installed in the gas tank. Stewart-Warner offers one for about $7.20, but a 1954 Plymouth float, among others, can also be used with good results if you lengthen the float arm by four inches. In selecting a float unit from a modern car, be sure to avoid the 12-volt ones, and remember that the resistance is not the same in all, and this may result in incomplete readings by the gauge. The Plymouth float makes the S.W. gauge read "empty" when the tank is empty, but only "⅞ full" when the tank is full.

I paid $3.00 for a complete 1954 Plymouth gas tank at the local auto wrecker's, and thus got not only the float unti but the valuable gas line filter which keeps rust flakes from clogging the line. In 1954 this filter was advertised as also keeping water out of the line, but I was able to draw water through it, so this latter feature can be questioned. To install the filter, first bend the tube to vertical position and check balance to assure that filter bottom is horizontal when allowed to dangle. Otherwise, vibration may eventually cause gas line to break.

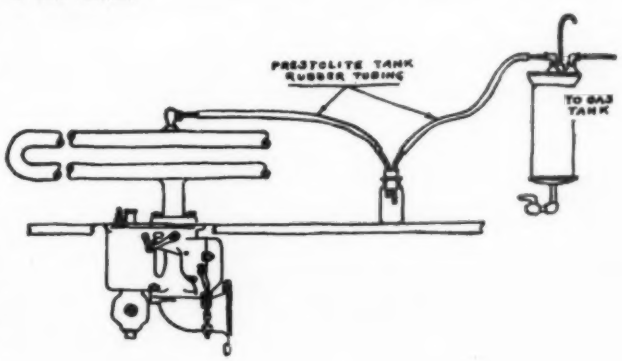
The gas line hole in the tank is too small to admit the filter head so it must be inserted through the hole you cut for the float unit, and then connected to the gas line with brass fittings. Make the hole just big enough to admit the filter, and you'll find it is just the right size to accommodate the float unit seat. You will find it necessary to amputate most of the hydrostatic tubing around the gas line, but leave a good breather tube so the fuel pump will not create a vacuun. (Safety Reminder: fill the tank with water before lighting your soldering torch).

The writer's Franklin completed a 1500-mile trip after the above modernization. Fuel system and electric gas gaug functioned perfectly, and continued satisfaction is anticipated. If you wish further information on the installation, write Clifford Boram, 104 Oak Street, Maywood, Ill.

TESTING VACUUM TANKS

If the spark plugs soot up excessively or if the engine loads up on a heavy pull, the trouble may be due to leaky valves in the vacuum tank, which permit gasoline to be drawn directly into the top of the suction yoke (manifold).

A simple test for this is to connect a small bottle between the vacuum tank and the suction yo_e as shown in cut. It will be necessary to use rubber tubing heavy enough not to collapse under the suction. Care must be taken that all joints are made airtight. If the vacuum tank is defective gasoline will collect in the bottle.



THE MARKET PLACE

FOR SALE

1924 Sedan, Series 10B, colony blue with black fenders, recent motor overhaul including new rings and rod bearings, good tires and battery, heater, passed 1958 inspection, need space —$590. Willard Prentice, 1721 East 35th, Baltimore 18, Maryland.

1922 Sedan, completed 1958 Glidden Tour. Ready to go anywhere $550. J. Palmer Prescott, Dudley, Mass.

Shovel Nose Bonnet. New Franklin valves and timing chains. 1923 cylinders and other parts for various models. Manuals, catalogs. factory service bulletins—to swap for similar Stutz material. A. K. Miller, Montclair, N. J.

1928 Series 12A 2-passenger coupe with golf bag door. Plush upholstery, mostly good except on seat. Needs new paint. Body very good. Car complete except for #2 piston. $175 or best offer. O. D. Whitewell. c/o Clark Controller Corp., 9107 West Ogden Ave., P. O. Box 68, Brookfield, Illinois.

Parts for Series 9B Franklin, 1921-1923, incl. Extra motor, rebuilt, with clutch and throwout collar. No carburetor. One complete front axle. Two front wheels. Need new wood. One rear wheel. Springs. spindles. steering arm. Two brake bands complete. H. F. Puariea, 1605 First St., Milwaukie 22, Oregon.

Franklin Key Chains. with replica of Series 10A and B nameplate. 30c each postpaid. Clifford Boram, 104 Oak St., Maywood, Ill.

1919 Touring completely restored vear ago. Very good tour car and completely authentic. I have $1300 invested. Brass script for early Franklin cars $8.50 polished and postpaid. Satisfaction guaranteed. Arthur Evans, Bangor, Pa., R. D. #2.

For Series 13 or later: Set of four wheels and six 19" demountable rims complete. $25. For Series 10: Transmission gears, case, and air compressor. For 1910 Model H: Jump seats. Pinion gear. For 1909 Model D: A few miscellaneous parts. G. W. Lamphere, West Rutland, Vt.

1934 Four Door Sedan, Six wire wheels, good motor, 6 good tires. Can be driven anywhere. First $175 takes it. Has 1958 Antique car license. Frank Deakin, Middletown, Iowa.

For Series 10—Distributor complete. $8. Dick Lamphere, Route 3, Kingston, Tenn.

1929 Four Door, good condition. Owner no longer able to renew drivers license. Henry C. Shippee, 1519 Courtney Ave., Hollywood 46, Calif.

1925 Four Door. very good condition, 5 good tires. Lloyd A. Bedwell, 928 N. Ontario, Burbank, Calif.

1929 Series 13 Limousine, mechanically excellent. New top, no rust, sidemounts, trunk rack, drive anywhere. 1934 Olympic sedan, steel covered sidemounts, excellent restorable condition, motor perfect. Asking $300. each. Frank B. Ober, Monkton, Md.

Screw on Type aluminum hubcaps for Seroes 14 wood wheels new, have only two. $2.50 each. Rumble seat lid complete with hinges, units and springs for Series 11 Coupes only. Used, $9.50 postpaid. Clifford Boram, 104 Oak St., Maywood, Ill.

Illustrated Parts and service manuals 1920-1933 plus many new and used Franklin parts (small truck load) including new pistons (complete with rings and pins), gears, bearings, headlites, taillites, valves, etc. Sell only as a lot, estimated value $1000 for $150 or will trade for Pierce-Arrow books and parts. H. Reeves, Jr., 1300 W. Concord, Orlando, Fla.

Classified advertisements are free to members, subject to available space. Advertisements from non-members may be accepted, without charge, at the discretion of the Classified Editor. Illustrated advertisements may be accepted if accompanied by a clear glossy photograph and a check for $4.00.

Members are reminded that misrepresentation in advertisements may result in their being dropped from the Club rolls. They are further reminded that the publishing of their advertisements entails an obligation to answer all inquiries.

Henry C. Courten, Editor, Box 127, Bethpage, New York

Parts 1921-25: Crank case, $10; valve cover, $7; exhaust pipe, $4; exhaust manifold, $9; intake manifold, $7.50; cross over pipe, $5; 2 sedan doors 23-25, $20; 2 front wheels and rims, $25; front bumper, $10; rear bumper, $10; complete front axle, $20; 2 1921-25 front springs over and under $30; 1 fan and shield, $7.50; 5 650x18 Firestone tires and tubes, 95% tread, $90; S-130 and 135 cars for parts. Pompton Lakes Auto Wreckers (Joseph De Lorenzo) 122-140 Cannon Ball Road, Pompton Lakes, N. J.

Must Sell One for space. 1929 Series 137—7 passenger sedan, $800., 1928 Series 12—2 door Victoria, $700. 1927 Series 11—4 door $600. Bill Mackey, 511 10th St., S. E., Washington, D. C.

WANTED

For 1909 Model D Touring—Pattern for rear fenders. Would like to correspond with other Model D owners. Jack Wadsworth, 264 West Pamela Road, Arcadia, Calif.

For 1929 Franklin 135—Purolator oil filter, parking light, throttle. gas and oil gauges, speedometer, air filter, heater, new 19" tire flaps. Willard Prentice, 1727 East 35th St., Baltimore 18, Maryland.

1922 Touring parts car, (body only) in restorable condition. Have chassis. Belgrave F. Grostin, 306 Central Drive, Chattanooga 11, Tenn.

Steering Wheel for Series 9 or any 18" O.D. ring that I can adapt. Air pump (Kellog) assembly that works off generator on Series 9. Bill Cranker, 1961 Shenandoah Rd., Toledo, Ohio.

For 1930 Airman Sedan—Trunk and operators manual. John L. Barnett, P. O. Box 67, Red Oak, Ga.

Clean Touring Car—State condition and price. James H. Gray, M. D., Box 888, Belle, West Virginia.

For 1934 Model 18 Olympic—Crank hole cover with or without the name Franklin on it; pair of headlight lenses; second gear for transmission. Sanfjord B. Teu II, 4306 South 36th St., Arlington 6, Va.

For 1930-'34—Heater in serviceable condition. J. Palmer Prescott, Dudley, Mass.

For 1930—Manual. Arthur Benoit, P. O. Box 101, Furnace St., Westmoreland. N. Y.

For Series 5—Manual. George A. Kipp, Niverville, N. Y.

For Series 9: Gas tank gauge complete, or dial plate for same. Parts for Atwater-Kent distributor. For Series 16—rod inserts. or information on where to obtain same. Dick Lamphere, Route 3, Kingston, Tenn.

Cross Engine or Barrel Nose Franklin. Restored or unrestored. Brass script for my collection of early brass automobile script. Arthur Evans, Bangor, Pa., R. D. 2.

Barrel Hood Franklin. Fox or Holmes. Prefer eastern location. Earl W. Becker, 2727 Grandview Ave., York, Pa.

For Series 10C—Need 4 rocker arm cages. A. Idone and Sons, 220 Bedford Ave., Brooklyn, N. Y.

For 1933 Olympic—r. h. front locking door handle, wire wheel hub cap. For 1929 four door rear seat cushion. Paul L. Toplin, Trow Hill, R. F. D. #1, Barre, Vt.

LEADS

Franklin Transmission—Only identification is serial #T3148 on top. Contact Millard Graham, R. D. #2, Birdsboro, Pa., (Lead by Dr. A. Loomis Bell, member).

1931 Convertible Coupe, original paint, leather and top, 35,000 miles. Two tone tan, six wire wheels. Part of estate. Contact Everett Dickinson, 596 Atlantic Ave., Boston 10, Mass.

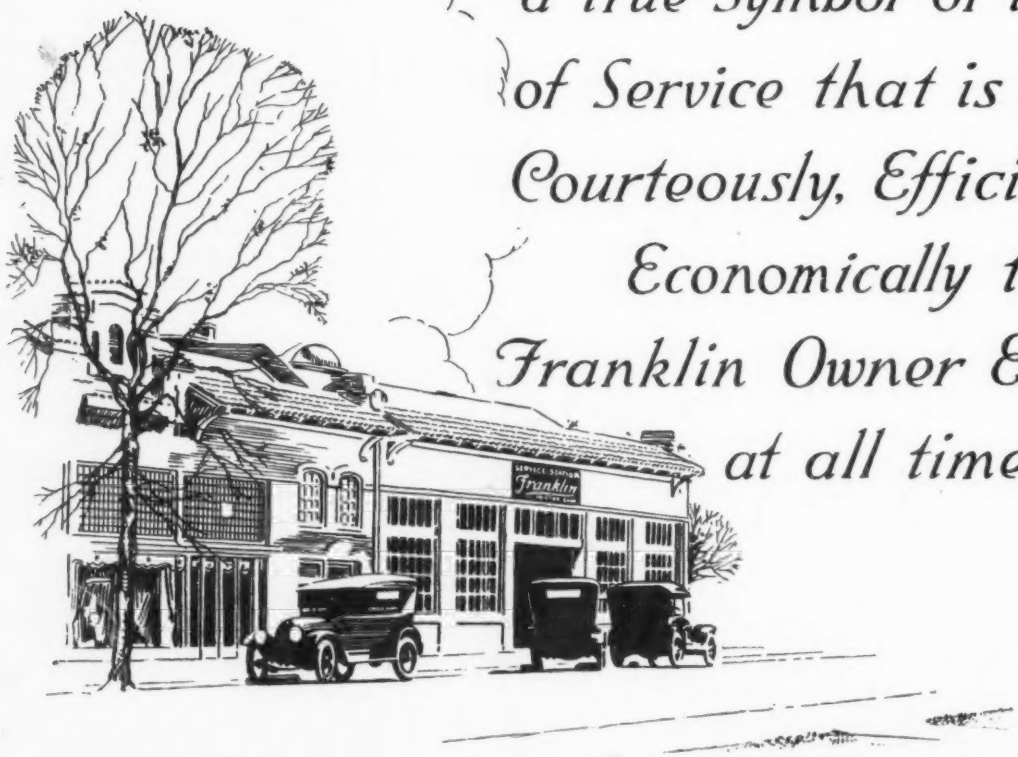
For Series 10—Many parts too numerous to mention. For sale only to those who really need them. Glad to correspond. J. N. Cain, Olde Mill House, Kingsville, Ohio.

SERVICE STATION

Franklin

Motor Cars

The Sign of Authorized Franklin Service

Our Goal—

To make this Sign a true Symbol of the kind of Service that is rendered Courteously, Efficiently and Economically to the Franklin Owner Everywhere at all times